Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



62.61 1901 Jule HAROBE VIND

U.S. Department of Agri

Select
List of
Tested
Varieties of

TREES

FRUIT

AND ORNAMENTAL.



Small Fruits.

HARDY
Shrubs, Vines,
Roses,
Plants, Etc.

WESTERN NEW YORK NURSERY CO.
ROCHESTER, NEW YORK.

INDEX.

Apples	7
Apricots	17
Asparagus	24
asparag us.	
Blackberries	20
Border Plants	63
Bulbs for Fall Planting	64
	480
Crab Apples	10
Cherries	13
Currants	21
Chestnuts	24
Climbing Vines	49
Dankaria.	
Dewberries	21
Evergreens	-0
Evergreen Shrube	38
Evergreen Shrubs	49
Grapes	18
Gooseberries	21
dooseberries	
Hedge Plants	52
Herbaceous Pæonies	53
	,,,
Lilies	39
Mulberries	24
Nectarines	18
Ornamental Deciduous Trees	- 27
Pears, Standard	The state of
Pears, Standard.	10
Pears, DwarfPlums	IO
Peaches	14
Phlox	
	54
Quinces	18
2	
Raspberries	23
Rhubarb	24
Roses	55
Shrubs, Deciduous	53
Tree Pæonies	53
Total Desired	200
Tree Roses	63
Walnuta	
Walnuts	24
Weeping Deciduous Trees	35

SUPPLEMENT S

TO

CATALOGUE

PUBLISHED JANUARY
1900

— BY ———

WESTERN NEW YORK NURSERY CO.

000

ROCHESTER, N. Y.

MAY 1st, 1901

INDEX TO SUPPLEMENT

												G	Ė.
Apples								:					3
Asparagus													5
Blackberries	,												5
Currants													5
Grapes													5
Grasses, Ornamental.													8
Pæony													8
Peaches				-									4
Pears													3
Plums													4
Quinces													5
Raspberries													5
Roses													8
Shrubs, Climbing													7
Shrubs, Evergreen.													7
Shrubs, Hardy													7
Shrubs, Standard													7
Strawberries													5
Trees, Ornamental													6
Trees, Weeping													6

NOVELTIES AND SPECIALTIES.

In addition to the general list of varieties offered in our catalogue, we have a number of new trees and plants, which we take pleasure in offering to the public; and we have included in this list, several old varieties of merit which were in error omitted from the catalogue. Most of the new varieties have been satisfactorily tested here, so that we have no hesitancy in recommending them. We specially draw attention to the Standard Shrubs.

WINTER APPLES.

- Cooper's Market (COOPER'S REDLING)—Medium size, conical; red, handsome; quality good; one of the latest keepers, and therefore very valuable. Tree hardy, a slender grower and productive. December to May.
- Longfield—A new Russian variety and one of the best. Tree a strong grower and an early, abundant and annual bearer. Flesh white, fine, tender and juicy, with a rich, sprightly, sub acid flavor. Season December to April. Valuable for cold climates.
- Smokehouse—Origin, Lancaster Co., Pa. Fruit rather above medium, roundish oblate, skin yellow, shaded and splashed with crimson, and sprinkled with large gray and brown dots. Flesh yellowish, firm, juicy, rather rich, sub-acid. Valued for culinary uses. December to February.
- Stark—An early and abundant bearer. Fruit large and valued for its long keeping; skin greenish yellow, shaded, sprinkled and striped with light and dark red, nearly over the whole surface, and thinly covered with light brown dots; flesh yellowish, moderately juicy, mild, sub-acid. Good. January to May.
- Wolfe River—Very large; beautiful red in the sun, on a yellow ground; strong grower and a good bearer. Original tree in Wisconsin is 30 years old, very healthy and extremely hardy. December to March.
- York Imperial—Medium; whitish, shaded with crimson in the sun, firm, crisp, juicy, pleasant, mild, sub-acid. Tree moderately vigorous and productive. Very popular in Pennsylvania. November to February.

VALUABLE NEW VARIETIES.

- Cox's Orange Pippin—Medium size, roundish, ovate; color yellow suffused with red streaks; flesh crisp, juicy, sweet, and best in quality. This is regarded by the English as the finest apple in cultivation, either as a dessert fruit or for culinary purposes. Tree a moderate, stocky grower. October to April.
- Walter Pease—Originated in Massachusetts. Fruit very large, nearly round; color, deep red on sunny side, with splashes and stripes of red on yellow ground on the other side; where fully exposed to the sun, nearly all red. Core very small; flesh white, very fine grained; quality best, mild, juicy, slightly sub-acid, with a rich, aromatic flavor. Tree very productive. September to January.

SELECT PEARS.

SUMMER.

Wilder Early—Medium or rather small, regular in form; greenish yellow, with a brownish red cheek; handsome, melting, sweet, pleasant, very good. Tree a vigorous grower and great bearer. First of August.

FALL.

- Vermont Beauty—Medium size: yellow, covered on sunny side with bright carmine red; rich, juicy, sub-acid. Ripens immediately after Seckel. Very hardy.
- Worden Seckel—A seedling of Seckel. Fruit medium size, borne in clusters, juicy, buttery, fine-grained, with a flavor and aroma fully equal to that of its parent, which it surpasses in size, beauty, and keeping qualities. Ripens in October, but will keep in good condition till December.

WINTER.

Dorset—A very handsome and showy late-keeping pear. Large, golden yellow ground, with bright red on sunny side; flesh juicy, melting, sweet, of good quality. Keeps and ships well and is a valuable late pear. Ripe in February, but keeps in perfection till May. Tree a vigorous grower.

PEARS OF RECENT INTRODUCTION.

- B. S. Fox—May be compared as to texture and quality with Anjou, but ripening in October. Stem short; color a beautiful yellow russet when ripe; flesh fine grained, very juicy, vinous; sound to the core. One of the most valuable introductions in pears of recent years.
- Col. Wilder—One of the longest keeping pears. Large, pyriform, oblong, inclining to oval; skin yellow, profusely dotted and marbled with russet; flesh melting, full of juice, sweet; a delicious pear; keeps till March. A fair grower.
- Koonce—Medium to large, very handsome, spicy, juicy, sweet, very good. Season very early. Tree vigorous, free from blight, and a better grower than Kieffer.
- P. Barry—One of the long keeping Fox seedlings. Large, pyriform; skin orange yellow, covered with russet dots and blotches; flesh very juicy, buttery, fine grained; flavor sprightly, rich, excellent. The best late winter pear. Resembles Anjou in texture of flesh, and Winter Nelis in color of skin and juiciness of flesh. Tree a poor grower and must be top grafted. Ripe in April.

SELECT PLUMS.

- Gueii—Fruit very large, deep bluish purple, covered with thick bloom; flesh yellowish green, coarse, sweet and pleasant; great bearer and very early; tree a hardy and rapid grower. One of the most profitable for market. Vigorous. First to middle of September.
- Jefferson—A fine variety; yellow with a red cheek; flesh orange-colored, juicy and rich; parts from the stone. Tree a slow, poor grower, but productive. End of August.
- Monarch—(New)—Fruit dark purple covered with a thin bloom; large size, specimens measuring six inches in circumference; flesh pale greenish yellow, parting freely from the stone; juicy, with a pleasant flavor. It is confidently predicted by well known authorities that this variety will surely be a leading market sort. The tree is a vigorous grower. September.
- Moore's Arctic—A hardy plum. Tree healthy, vigorous, an early and abundant bearer. Fruit medium; skin purplish black, thin blue bloom; flesh greenish yellow, a little coarse, juicy sweet. Ripens early in September.
- Ogon—Large, nearly round, bright golden yellow, with faint bloom; flesh firm, sweet, rich and dry. Tree vigorous and hardy. First of August.
- Quackenboss—Large, deep purple covered with a dense bluish bloom; flesh greenish yellow, sprightly, juicy, a little coarse grained; will rank good in quality. Tree vigorous and a great yielder. Valuable for market. Middle of September.
- Satsuma—(BLOOD)—Large, globular with sharp point. Color, purple and red with bloom; flesh firm, juicy, dark red or blood color, fine quality; pit very small. August.
- Shipper's Pride—Fruit large; color dark purple, handsome and showy; flesh firm, of excellent quality; very productive and is a valuable market variety.

SELECT PEACHES.

- Fitzgerald—A chance seedling found in Ontario, outside the peach belt, where it has produced regular crops. The fruit is of very large size, pit very small. This promising new peach is of the Crawford type but excels that famous variety in size, hardiness and productiveness. Season same as Early Crawford.
- Greensboro—A variety from North Carolina; said to be larger and earlier than Alexander; skin beautiful crimson with a yellowish cast, flesh white, very juicy, and of extra quality for so early a peach.
- Salway—An English peach; large, roundish; skin creamy yellow; flesh deep yellow, juicy, melting, rich. A valuable late peach for market, where it will ripen. It is grown successfully at Keuka Lake in this State.
- Triumph—From the South; said to be a freestone, ripening with Alexander; large yellow, nearly covered with red; flesh bright yellow, free when fully ripe, and of excellent flavor.

SELECT OUINCES.

Bourgeat—(A GOLDEN PROLIFIC QUINCE)—A new variety, of the best quality, tender and good. Ripening shortly after Orange, and keeping till past midwinter. Largest size, rich golden color, smooth, no creases. Rich velvety skin, with delicious quince odor. Foliage healthy. The strongest grower of the quinces, making a tree as large and thrifty as plums and pears, and yielding an immense crop, often fruiting at three and four years.

Meeche's Prolific-Fruit said to be larger than the Orange, resembling the Champion in shape and general appearance, though not averaging quite so large; of great beauty and delightful fragrance. Productive and ripens early.

HARDY NATIVE GRAPES.

Lucile—Said to be a most promising new red market grape, as large as Worden in bunch and berry; good quality, ripening early between Moore's Early and Worden; very vigorous, hardy, and productive.

McPike-A new black grape said to be a seedling of the Worden, and to produce

berries of great size.

BLACKBERRIES.

Rathbun-A promising new variety. Berries extra large, jet black, quality good. Said to be perfectly hardy.

CURRANTS.

Pomona-A new red currant of good size; very productive, sweet, of excellent quality.

Red Cross-A fine new red currant of large size; long clusters; mild, pleasant flavor; a vigorous grower and very productive.

Wilder-A new red currant, fruit large, fine flavored, great yielder, very profitable for market.

RASPBERRIES.

Eureka—(Black Cap)—Very large, glossy black, juicy, rich; hardy and very productive. We regard it as a valuable, very early variety.

ESCULENT ROOTS.

Asparagus-Columbian Mammoth White. BARR'S MAMMOTH.

STRAWBERRIES.

STANDARD WELL TRIED VARIETIES.

Those marked (P) have pistillate or imperfect flowers, and must be planted near perfect-flowering kinds, in order that the flowers may be fertilized. The varieties not so marked are bi-sexual or perfect flowering, and can be planted alone.

Beder Wood-Large, roundish conical, bright scarlet, moderately firm, fair quality; plant vigorous and very productive. A valuable early sort for home use or near market, following Michel's Early.

Brandywine-Large, roundish conical, of fine quality; moderately firm; prolific; season medium to late; a valuable late variety.

Bubach (No. 5) (P)—Fruit large and handsome, roundish conical, bright scarlet, moderately firm, of fair quality; plant a strong grower, with large, healthy foliage, and very productive; succeeds on light or heavy soil. Desirable for home use and near-by market. This has proved to be one of the best Strawberries. Season early to medium.

- Haverland (P)—Large, long, light red; moderately firm, medium quality, ripens all over. Very vigorous and healthy, and a great yielder; a valuable variety for home use or near market; needs to be well mulched to keep fruit clean; season early.
- Lovett—Large, roundish conical, uniform, seldom ill-shaped, bright crimson, quality good. A variety of merit, continuing good through the season.
- Marshall—Very large, roundish, dark, rich crimson; quality very good, firm; plant vigorous, productive; season medium to late. One of the largest and finest Strawberries of recent introduction. We consider this one of the very best varieties for all purposes.
- McKinley—This variety has been thoroughly tested on our grounds, and we consider it a superior Strawberry, being remarkable for its size, shape, color, and quality. Berry large, roundish, inclining to conical, but sometimes flattened or coxcombed; color crimson; flesh firm and quality very good. The plant is vigorous, healthy, and a great yielder; flowers bi-sexual or perfect. Season medium to late. We can confidently recommend it for garden and market culture.
- Michel's Early—This is the first variety to ripen here; berry medium to large, roundish, bright crimson, firm, fair quality; plant a strong grower and a good bearer. We consider this valuable on account of its earliness and productiveness.
- Parker Earle—Uniformly large, regular, conical, with a short neck; color glossy scarlet crimson; ripens all over; flesh moderately firm, no hollow core, quality good; flowers perfect. Plant very vigorous, healthy, and remarkably productive.
- Sharpless—We have fruited it extensively, and regard it as one of the very largest and best Strawberries in cultivation. Plant very hardy, enduring both heat and cold without injury here. To secure the best results, we advise "hill culture."

DECIDUOUS ORNAMENTAL TREES.

- CATALPA—Bungei (CHINESE CATALPA)—A species from China, of dwarf habit, growing only from three to five feet high. Foliage large and glossy; a shy bloomer. Top grafted on tall stems it makes an effective umbrella-shaped tree.
- MAGNOLIA—Conspicua—A Chinese species of great beauty. The tree is of medium size, shrub-like in growth while young, but attains the size of a tree in time. The flowers are large, pure white, very numerous, and appear before the leaves.
 Lennei—Foliage large, flowers dark purple. A superb variety.
 - Speciosa (Showy-Flowered)—Resembles the M. Soulangeana in growth and foliage, but the flowers are a little smaller and of a lighter color, fully a week later, and remain in perfect condition upon the tree longer than those of any other Chinese variety. These qualities, combined with its hardiness, render it in our estimation one of the most valuable sorts.
 - Stellata (HALLEANA or HALL'S JAPAN)—It is of dwarf habit and produces its pure white, semi-double fragrant flowers in April, earlier than any other Magnolia.
- MAPLE—Blood-leaved Japan—Of dwarf habit and rounded form; foliage five-lobed and serrated; reddish crimson in June. A charming variety and one of the best of the Japanese Maples.
 - Palm-leaved Japan—Leaves five to seven-lobed, deep green, changing to crimson at autumn; habit upright, very compact.
- POPLAR—Bolleana—A very compact upright grower, resembling the Lombardy Poplar, with leaves glossy green above and silvery beneath.

WEEPING DECIDUOUS TREES.

- DOGWOOD-Weeping-A variety of Cornus florida, with decidedly drooping branches.
- LILAC-Chinese Weeping-A variety of graceful drooping habit.

HARDY DECIDUOUS SHRUBS.

DEUTZIA—Lemoineii—A hybrid obtained by Mons. Lemoine of France, by crossing the well known Deutzia gracilis with Deutzia parviflora. Flowers pure white, borne on stout branches, which are of upright growth. Habit dwarf and free-flowering. A decided acquisition.

SPIRÆA—Arguta—Of dwarf habit; flowers clear white. The best very early flowering white Spiræa. Early May.

WEIGELA—Eva Rathke—A charming new Weigela, flowers brilliant crimson; a beautiful, distinct, clear shade.

XANTHOCERAS—Sorbifolia (CHINESE CHESTNUT)—From Central China. Forms a shrub or small tree, foliage resembling that of the Service Tree or Mountain Ash; flowers five-petaled, white, reddish copper-colored at base, disposed in racemes about eight inches long; flowers expand in April or May with the leaves. It is very floriferous, young plants flowering freely. Requires protection until established.

EVERGREEN SHRUBS.

KALMIA—Latifolia (MOUNTAIN LAUREL OR CALICO BUSH)—A beautiful native evergreen shrub, with shining foliage and dense clusters of pink or nearly white flowers in spring. Requires same treatment as the Rhododendron.

STANDARD SHRUBS.

The practice of training shrubs in tree form is comparatively new, and has proven unsurpassed for the pleasing effect produced in formal gardening work. As centres for beds, groups, etc., or for straight lines bordering walks, they are especially appropriate. A collection of assorted colors of the Althæa will prove much more reliable and satisfactory than Tree Roses, while being equally as attractive when in bloom.

STANDARD SHRUBS should be supported by stakes to prevent injury from wind or heavy snowfalls. Two strong stakes should be driven firmly in the ground, one on either side of the shrub, which should be securely fastened to these stakes with soft rope or other such substance that would not injure the bark of the shrub.

ALTHÆA—Finest double-flowering varieties of the following colors, viz.: Red, purple, variegated, white, and pink. 3 to 4 foot stems.

DEUTZIA—Candida and Pride of Rochester—3 to 4 foot stems.

FORSYTHIA-Fortuneii-3 to 4 foot stems.

HYDRANGEA—Paniculata Grandiflora—2 to 2½ foot stems.

PRIVET-California-3 to 4 foot stems.

Sinense—Glaucous foliage. 3 to 4 foot stems.

SNOWBALL-See Viburnum.

SPIRÆA-Opulifolia-(White flowers). 3 to 4 foot stems.

SYRINGA-Grandiflora or large=flowered.

Nivalis fl. pl.—(Double). 3 to 4 foot stems.

VIBURNUM—Plicatum—Certainly a grand shrub in tree form. 2 to 3 foot stems.

WEIGELA-Candida-3 foot stems.

WISTARIA—Frutescens or shrubby—3 to 4 foot stems.

CLIMBING AND TRAILING SHRUBS.

CLEMATIS-Brillet des Champ-Double purple.

Duchess of Edinburg-Double white.

MATRIMONY VINE—Chinese—A vigorous climber, branching freely, and covered with bright purple, star-shaped flowers, succeeded by brilliant scarlet berries almost an inch long; the contrast between the glossy, dark green foliage and shining scarlet fruit being exceedingly beautiful. Flowers and fruit continue forming throughout summer, when the fruit ripens and remains on the vine until winter. Of the easiest culture, thrives everywhere and in any soil.

HERBACEOUS.

PÆONY—Fringe=leaved—Double, fennel-leaved; flowers of a bright scarlet crimson, and quite double and globular; rare and fine.

HARDY ROSES.

NEW CLIMBER.

William C. Egan—Entirely new and distinct. The habit of the plant is subclimbing, but vigorous and healthy, with bright glossy foliage. The flower is large and very full, resembling in shape as well as color the Souvenir de la Malmaison. Although only an annual bloomer, it remains in flower several weeks, and the large trusses of superb blooms are unusually attractive. Perfectly hardy.

NEW RUGOSA.

Blane Double de Coubert, vig.—A new variety with double, pure white flowers, possessing a delightful fragrance. A distinct and beautiful rose.

NEW YELLOW HYBRID PERPETUAL.

Soliel d'Or (SUN OF GOLD)—This magnificent variety, like the Persian Yellow, is perfectly hardy. It retains a good deal of the character of the Persian Yellow, the bark of the wood being reddish, the thorns very fine, the foliage more ample, and the leaves, of a beautiful clear green, are closer together. Its growth is robust, very vigorous, making plants three feet in height. The flowers are large, full, and globular, measuring 3½ inches across, and fragrant; buds conical shaped; color superb, varying from gold and orange-yellow to reddish-gold, shaded with nasturtium red. The color stands the sun well. This should be a very valuable rose.

ORNAMENTAL GRASSES.

- ARUNDO—Donax—A handsome Reed, growing from 10 to 15 feet high. Its attractive foliage renders it very effective on lawns. Invaluable for creating tropical aspects in a garden.
- ERIANTHUS—Ravennæ—Resembles the Pampas Grass, but blooms more abundantly. Attains a height of from nine to twelve feet. Being perfectly hardy, is a valuable grass for the decoration of lawns.

CATALOGUE

OF

Fruit and Ornamental Trees,

Small Fruits, Shrubs, Vines, Roses, Hardy Plants, Etc.



FOR SALE BY

WESTERN NEW YORK NURSERY CO.
ROCHESTER, N. Y.

PREFACE.

In presenting this edition of our Descriptive Catalogue, illustrated with half-tone engravings, we wish to state that it includes such of the old varieties as are still considered desirable, and such new varieties from home and abroad as have been most thoroughly tested here at great expense and found worthy of wide dissemination. Our collections of tested stock embrace varieties suited to the different soils and climates of this great country.

The greatest possible care is exercised so that customers will receive healthy, vigorous trees or plants, true to name. The lifting, handling, packing and shipping receive our personal attention, so that we can promise our patrons that their orders, large or small, will be properly executed.

It is our aim and intention to supply only the best stock at the lowest prices consistent with the quality of the goods offered.

Our traveling Agents employed in soliciting orders are men of well-known integrity, who are bound to act faithfully and impartially for the interests of their customers as well as of their employers. Parties entrusting their orders to them may depend upon their being filled in the best manner as far as possible. It often happens, however, that certain varieties of fruits and other articles are ordered, which cannot be supplied, in consequence of the stock being exhausted by previous orders, or of some other unforeseen cause. It is not reasonable to suppose that we can supply everything called for; we do all in our power, and trust that our customers will be satisfied with this.

Each of our authorized agents carries a Certificate of Agency that we issue each season; all agents claiming to represent our house, who do not carry such a Certificate from us, are to be regarded as imposters.

January, 1900.

WESTERN NEW YORK NURSERY CO.

FRUIT DEPARTMENT.

HINTS ON TRANSPLANTING, ETC.

WE cannot attempt to give complete directions on all points connected with Tree Planting, but simply a few hints on the more important operations. Every man who purchases a bill of trees should put himself in possession of some treatise on tree culture, that will furnish him with full and reliable instructions on the routine of management. Transplanting is to be considered under the following heads:

Ist. THE PREPARATION OF THE SOIL.—For fruit trees the soil should be dry, either natural or made so by thorough drainage, as they will not live or thrive on a soil constantly saturated with stagnant moisture. It should also be well prepared by twice plowing, at least, beforehand, using the subsoil plow after the common one at the second plowing. On new, fresh lands, manuring will be unnecessary; but on lands exhausted by cropping, fertilizers must be applied, either by turning in heavy crops of clover, or well decomposed manure or compost. To ensure a good growth of fruit trees, land should be in as good condition as for a crop of wheat, corn or potatoes.

2d. THE PREPARATION OF THE TREES.—In regard to this important operation, there are more fatal errors committed than in any other. As a general thing, trees are planted in the ground precisely as they are sent from the Nursery. In removing a tree, no matter how carefully it may be done, a portion of the roots are broken and destroyed, and consequently the balance that existed in the structure of the tree is deranged. This must be restored by a proper pruning, adapted to the

size, form and condition of the tree, as follows:

STANDARD ORCHARD TREES.—These, as sent from the Nursery, vary from five to seven feet in height, with naked stems or trunks, and a number of branches at the top forming a head. These branches should all be cut back to within three or four buds of their base. This lessens the demand upon the roots, and enables the remaining buds to push with vigor. Cut off smoothly all bruised or broken roots up to the sound wood. In case of older trees, of extra size, the pruning must be in proportion; as a general thing it will be safe to shorten all the previous year's shoots to three or four buds at their base, and where the branches are very numerous some may be cut out entirely.

DWARF OR PYRAMIDAL TREES, if of two or three years' growth, with a number of side branches, will require to be pruned with a two-fold object in view, viz.: The growth of the tree and the desired form. The branches must be cut into the form of a pyramid by shortening the lower ones, say one-half, those above them shorter, and the upper ones around the leading shoots to within two or three buds of their base. The leader itself must be shortened back one-half or more. When trees have been dried or injured much by exposure, the pruning must be closer than if in good order.

YEARLING TREES INTENDED FOR PYRAMIDS.—Some of these may have a few side branches, the smallest of which should be cut clean away, reserving only the strongest and the best placed. In other respects they should be pruned as directed for trees of two years' growth. Those having no *side branches* should be cut back so far as to insure the production of a tier of branches within twelve inches of the ground. A strong yearling, four to six feet, may be cut back about half, and the

weaker ones more than that. It is better to cut too low than not low enough, for if the first tier of branches be not low enough the pyramidal form cannot afterwards be perfected.

3d. PLANTING.—Dig holes in the first place large enough to admit the roots of the tree to spread out in their natural position; then, having the tree pruned as before directed, let one person hold it in an upright position, and the other shovel in the earth, carefully putting the finest and the best from the surface in among the roots, filling every interstice, and bringing every root in contact with the soil. When the earth is nearly filled in, a pail of water may be thrown on to settle and wash in the earth around the roots; then fill in the remainder and tread gently with the foot. The use of water is seldom necessary, except in dry weather early in fall or late in spring. Guard against planting too deep; the trees, after the ground settles, should stand in this respect as they did in the nursery. Trees on Dwarf stock should stand so that all the stock be under the ground, and no more. In very dry, gravelly ground the holes should be dug twice the usual size and depth, and filled in with good loamy soil.

4th. STAKING.—If trees are tall and much exposed to winds, a stake should be planted with the tree, to which it should be tied in such a manner as to avoid chafing. A piece of matting or cloth may be put between the tree and the stake.

5th. MULCHING.—When the tree is planted throw around it as far as the roots extend, and a foot beyond, five or six inches deep of rough manure or litter. This is particularly necessary in dry ground, and is highly advantageous everywhere both in spring and fall planting. It prevents the ground from baking or cracking, and maintains an equal temperature about the roots.

6th. AFTER-CULTURE.—The grass should not be allowed to grow around young trees after being planted, as it stunts their growth. The ground should be kept clean and loose around them until, at least, they are of bearing size.

TREATMENT OF TREES THAT HAVE BEEN FROZEN IN THE PACKAGES OR RECEIVED DURING FROSTY WEATHER.—Place the packages, unopened, in a cellar or some such place, cool, but free from frost, until perfectly thawed, when they can be unpacked, and either planted or placed in a trench until convenient to plant. Treated thus, they will not be injured by the freezing, Trees procured in the fall for spring planting, should be laid in trenches in a slanting position to avoid the winds; the situation should also be sheltered and the soil dry. A mulching on the roots and a few evergreen boughs over the tops will afford good protection.

DISTANCE BETWEEN TREES OR PLANTS IN PLANTATIONS.

STANDARD APPLES, 30 to 40 feet apart each way. In poor soil, 25 feet may be enough.

STANDARD PEARS AND CHERRIES, 20 feet apart each way. Cherries will do at 18 feet, and the dwarf growing sorts, Dukes and Morellos, even at 16 feet.

STANDARD PLUMS, PEACHES, APRICOTS AND NECTARINES, 16 to 18 feet apart each way.

Quinces, 10 to 12 feet apart each way.

DWARF OR PYRAMIDAL PEARS, CHERRIES AND PLUMS, 10 to 12 feet apart each way. The greater distance is better where land is not scarce.

DWARF APPLES (bushes), 6 feet apart.

CURRANTS, GOOSEBERRIES AND RASPBERRIES, 3 to 4 feet apart.

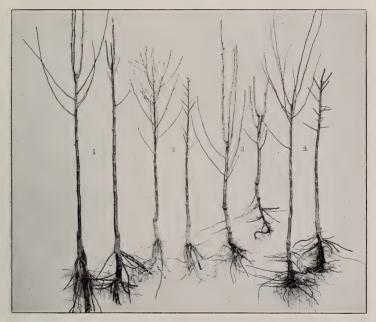
BLACKBERRIES, 6 to 7 feet apart.

GRAPES, 8 to 10 feet apart.

NUMBER OF TREES OR PLANTS ON AN ACRE AT VARIOUS DISTANCES.

At	4 fee	t apart	each	ı way	 	 			 	 	 	 	 		 	 		 	2,	729
44	5	66 APAT		"	 	 		٠.	 			 	I,	742						
46	6	"		66		 			 	 	 	 	 		 	 	 	 	Ι,	200
46	8	**		"	 	 			 		 	 		68 o						
4.6	10	"		"	 	 	٠.		 		 	 		430						
46	12	66		"	 	 	٠.		 	 		 	 	 	 		 	 		325
64	15	64																		
41	18	"		66		 			 	 	 		 	 	 		 	 		135
46	20	64		66																IIO
46	25	44		6.6	 	 			 		 			70						
46	30	"																		50

The number of plants required for an acre, at any given distance apart, may be ascertained by dividing the number of square feet in an acre (43.560) by the number of square feet given to each plant, which is obtained by multiplying the distance between rows by the distance between the plants.



TREES PRUNED AND UNPRUNED.

HOW TO PREPARE FRUIT TREES FOR PLANTING.

Illustrations showing how they should be pruned before planting. (See above cut.) In each case an example is given of an unpruned and pruned tree. No. 1. Standard, with stem or trunk clear of branches. Standard Apples, Pears, Cherries, and Plums have usually this form. No. 2. Peach Tree, No. 3. Dwarf Pear. The usual appearance of trees, two to three years from bud, prepared for training in pyramidal form. No. 4. Quince Tree.

TERMS USED IN DESCRIBING THE HABIT OF GROWTH.

Referring to young trees of two to four years growth.

VIGOROUS.—Being those varieties of strong, rapid growth. Free.—Varieties which rank next to above in growth. Moderate.—Varieties which make a fair growth, some being slender growers, others slow growers.

SPRAYING.

The depredations of insects and ruination by mildew have become of so serious a nature to fruit raisers, that much time, money and experiment have been expended in efforts to discover the best methods of battling with these pests. Spraying has been universally adopted as the best, in fact, only, practical method of overcoming the ravages of these enemies of the fruit grower. We give below a few of the best formulas for practical use in the orchard and garden.

FORMULAS.

Bordeaux Mixture:

Copper Sulpha	te	 	6 lbs.
Quick Lime		 	4 lbs.
Water		 	45 gals.

The copper sulphate must first be dissolved in the water, which should be done as follows: The copper sulphate must first be dissolved in the water, which should be done as follows: Place the copper sulphate in an earthen or wooden vessel (do not use metal) and pour on the water occasionally until all the blue crystals are dissolved. Slack the lime in three or four gallons of water; stir well and when cooled off, strain through a fine sieve or cheese cloth into the vessel containing the copper sulphate solution. Do this carefully that nothing may pass through the strainer that might stop up the nozzle of the sprayer. Add sufficient water to make 45 gallons of solution, and it is ready for use.

To be used on all fungous diseases

To be used on all fungous diseases.

Ammoniacal Copper Carbonate:

Copper Carbonate	oz.
Ammonia (22 degrees Beaume) 1	qt.

Agitate until the copper is completely dissolved. This solution, if bottled up, will keep indefinitely, but should be diluted with 25 gallons of water before using.

To be used on all fungous diseases, and is especially good for last two or three sprayings for

Kerosene Emulsion:

Hard Soap	½ lb.
Boiling Water (soft)	
Kerosene	2 gal s .

Dissolve the soap in the water, then, while hot, add the kerosene and agitate or churn the mixture rapidly for ten minutes or longer until thoroughly mixed. In applying use one part solution to ten to twenty-five parts water, according to the degree in which the plants are affected. Use a strong solution for all scale insects. For insects which suck, such as plant lice, mealy bug, red spider, thrip, aphis, etc., use a weaker solution.

Hellebore:

Use fresh white hellebore powder. When used in solution, 1 ounce hellebore to three gallons of water. Stir well and apply to currant and gooseberry bushes with a fine watering pot orspray with a whisk broom. The dry powder may be applied safely when dew is on the leaves. When using the powder, dust through cheese cloth bags if you have no bellows made for the purpose.

Paris Green Solution:

For codlin moth on apple trees, 1 lb. Paris green to 200 gals. water. Stir well before and while using, and apply with a spraying pump, throwing the solution well over the trees so it will fall and cover the leaves and fruit.

For peach, plum and cherry trees, 1 lb. Paris green to 250 or 300 gals. water, and 1 lb. quick lime (slacked) added to the solution.

For quince and pear trees, 1 lb. Paris green to 200 gals water, and 1 lb. lime as above.

For Rust on Strawberries use Bordeaux Mixture or Ammoniacal copper carbonate solution. The latter use before berries are picked, provided the leaves show rust, otherwise not until fruiting season is over.

For Elm Beetle:

Paris Green	1 lb.
Water.	
Flour	
Lime (slacked and strained)	3 lbs.

Spray first time as soon as the leaves begin to start, or as soon as first holes, the size of small shot, appear through the leaves. The spraying this time may be done so as to throw the solution over the tree, allowing it to lodge on the tops of the leaves. About the 15th or 20th of June spray again, this time directing the spray up into the tree in such a manner as will cause the solution to strike the under side of the leaves, as this is where the eggs are deposited, and where the larva remains and eats.

SELECT APPLES.

Our principal stock of Apples consists of the following varieties, which have been well proved, and can be recommended as the best now in cultivation:

STANDARD TREES are those intended for Orchards; these are about five to six feet in height, with a proportionate thickness. Some varieties are larger and more handsome than others, owing to the natural difference of growth, so that it is unreasonable to expect all varieties to be equally large and straight. We can furnish Standard Trees of all the varieties described.

DWARF TREES for *Bushes* and *Espaliers* can be supplied of several sorts on *Paradise* stocks. We propagate only those varieties which produce large, handsome fruit, mostly summer and autumn kinds: *a list of varieties furnished on application*. On the Paradise stock the trees are small, prolific, bear early, and are therefore desirable for small gardens or experimental orchards. They can be planted 5 or 6 feet apart, and will bear abundantly the third year after planting.

SUMMER APPLES.

- **EARLY HARVEST**—Medium to large size; pale yellow; tender, with a mild, fine flavour. Tree a *moderate* erect grower and a good bearer; a beautiful and excellent variety for both orchard and garden, being one of the first to ripen. Middle to end of August.
- **GOLDEN SWEET**—Large; yellow; a very fair, fine sweet apple. Tree a *free* grower, spreading, irregular and productive. August and September.
- **KESWICK CODLIN**—Large, oblong, pale yellow; pleasant acid; quality fair. Tree erect and very *vigorous*; bears when quite young, and abundantly; excellent for cooking. July to October.
- RED ASTRACHAN—Large, roundish; nearly covered with deep crimson, overspread with a thick bloom; very handsome; juicy, good, though rather acid. The tree is very hardy, a *free* grower, with large foliage and a good bearer; highly esteemed on account of its fine appearance, earliness, and hardiness. August.
- **SWEET BOUGH**—Large; pale yellow, sweet, tender and juicy. Tree a *moderate*, compact grower, and abundant bearer. August.
- **TETOFSKY**—A handsome Russian apple, medium size, with a yellow ground, hand-somely striped with red, and covered with a whitish bloom; flesh juicy, sprightly, acid and agreeable. Tree, a *moderate*, stocky grower, very hardy and productive. July and August.
- YELLOW TRANSPARENT—A Russian apple, medium size, roundish, oblate, slightly conical; skin pale yellow when fully mature; flesh tender, juicy, sprightly sub-acid; good; a free grower. August.

AUTUMN APPLES.

- ALEXANDER—Origin Russian. A very large and beautiful deep red or crimson apple, of medium quality. Tree very hardy. September and October.
- **CHENANGO**—(Sherwood's Favorite)—Large, oblong; red and yellow; very handsome; highly valued as a table or market fruit on account of its handsome appearance and fair quality. Tree a vigorous grower and very productive. September.
- **FALL PIPPIN**—Very large, roundish, oblong; yellow; flesh tender, rich, and delicious. Tree a *free* grower, spreading and fine bearer; one of the most valuable varieties for table or market. An admirable baking apple. October to December.
- FAMEUSE—(Snow Apple)—Medium size; deep crimson; flesh snowy white, tender, melting and delicious. Tree vigorous; one of the finest dessert fruits, and valuable for market; succeeds particularly well in the North. November to January.
- GRAVENSTEIN—A very large, striped, roundish apple, of the *finest quality*. Tree remarkably rapid, *vigorous*, and erect in growth, and very productive. One of the finest fall apples. September to October.
- HAAS, OR FALL QUEEN—Large, flat, ribbed or quartered; skin yellowish green, streaked and nearly covered with dull, brownish red; flesh white; tender, juicy, sub-acid, good. Tree very hardy and vigorous. Highly esteemed at the West and Southwest as a profitable market fruit and for family use. September to November.

- **HURLBUT**—Fruit medium size, oblate, angular, skin yellow with red stripes, and splashed with red; flesh white, crisp, tender, juicy, sub-acid; quality good to very good. Tree *very vigorous* and a great bearer. October to December.
- MAIDEN'S BLUSH—Large, flat; pale yellow with red cheek; beautiful; tender and pleasant, but not high flavored. Tree an erect *free* grower, and a good bearer. A valuable market apple. September and October.
- **OLDENBURG**—(Duchess of Oldenburgh)—A large, beautiful Russian apple; roundish; streaked red and yellow; tender, juicy, and pleasant. Tree a vigorous, fine grower and a young and abundant bearer. September. Succeeds well in the Northwest, where most varieties fail.
- **PUMPKIN SWEET**—(**Pumpkin Russet**)—A very large, round, yellowish, russet apple, very sweet and rich. Tree a *vigorous*, rapid, upright grower; valuable. October and November.
- **RED BIETIGHEIMER**—A rare and valuable German variety. Fruit large to very large; roundish, skin pale, cream-colored ground, mostly covered with purplish crimson; flesh white, firm, sub-acid, with a brisk, pleasant flavor. Tree a *free* grower and abundant bearer. This is one of the largest and hand-somest apples. September and October.

WEALTHY—Originated near St. Paul, Minn. Fruit medium, roundish; skin smooth, oily, mostly covered with dark red; flesh white, fine, juicy, vinous, sub-acid, very good. Tree very hardy, a *free* grower, and productive. A variety of much value on account of its great hardiness and good quality. October.

WINTER APPLES.

- **BALDWIN**—Large, bright red, juicy and rich. Tree *vigorous*, upright and productive. In New England, New York, Ontario and Michigan this is one of the most popular and profitable sorts for either table or market. December to March.
- BEN DAVIS—(New York Pippin)—A large, handsome, striped apple of good quality. Tree very hardy, vigorous, and productive; a late keeper; highly esteemed in the West and Southwest.
- **ESOPUS SPITZENBURG**—Large, deep red with gray spots, and delicately coated with bloom; flesh yellow, crisp, rich and excellent. Tree rather a *feeble*, slow grower, and moderate bearer; esteemed in this state as one of the very best. November to April.
- **FALLAWATER**—A very large and handsome apple from Pennsylvania; quality good. Tree *vigorous*, bears young and abundantly. November to March.
- GOLDEN RUSSET—Medium size, dull russet, with a tinge of red on the exposed side; flesh greenish; crisp, juicy and high flavored. Tree a vigorous grower, with light colored speckled shoots, by which it is easily known; hardy, bears well; popular and extensively grown in Western New York. November to April.
- **GRIMES' GOLDEN**—Medium to large size; skin golden yellow sprinkled with gray dots; flesh crisp, tender, juicy, sprightly, very good to best. Tree hardy, vigorous, productive. January to April.
- HUBBARDSTON—Large; striped yellow and red; tender, juicy and fine; a free grower and great bearer. November to January.
- JONATHAN—Medium size; red and yellow; flesh tender, juicy and rich; a moderate grower; shoots light colored, slender and spreading; very productive. One of the best varieties either for table or market. November to March.
- KING-See Tompkins King.
- LADY APPLE—A beautiful little dessert fruit; flat, pale yellow, with a brilliant red cheek; flesh crisp, juicy and pleasant. The tree is a moderate grower, forms a dense, erect head, and bears large crops of fruit in clusters; the fruit sells for the highest price in New York and Philadelphia. November to May.
- LYMAN'S PUMPKIN SWEET—(Pound Sweet)—A very large, round, greenish apple, excellent for baking. Tree a free grower and productive. October to December.

MANN—Medium to large; deep yellow, often with a shade of brownish red where exposed; juicy, mild, pleasant, sub-acid. Tree hardy and an upright grower; an early and annual bearer, and a late keeper. January to April.

McINTOSH RED—Very hardy, vigorous and productive; fruit handsome and of good quality; regarded as valuable for the North. November to February.

- NEWTOWN PIPPIN—One of the most celebrated of American apples, on account of its long keeping and excellent qualities, and the high price it commands abroad; but its success is confined to certain districts and soils. It attains its greatest perfection on Long Island and the Hudson. In Western New York and New England it rarely succeeds well. It requires rich and high culture, and it makes such a slow, feeble growth, that it has to be top grafted upon a strong growing variety. November to June.
- NEW YORK PIPPIN-See Ben Davis.
- NORTHERN SPY—Large; striped, and quite covered on the sunny side with dark crimson, and delicately coated with bloom. Flesh juicy, rich, highly aromatic, retaining its freshness of flavor and appearance till July. The tree is a remarkably rapid, erect grower, and a great bearer. Like all trees of the same habit it requires good culture and an occasional thinning out of the branches, to admit the sun and air fully to the fruit. One of the finest late keeping apples.
- PEWAUKEE—Origin Pewaukee, Wis. Raised from the seed of the Duchess of Oldenburgh. Fruit medium to large, roundish, oblate; skin bright yellow, striped and splashed with dark red; flesh white, tender, juicy, sub-acid. Esteemed especially for cold climates, on account of its hardiness. Tree vigorous. January to May.
- RAMBO—Medium size; streaked and mottled yellow and red; tender, juicy, mild flavored. Tree a vigorous grower and good bearer. A widely cultivated and esteemed old variety. Autumn in the South; October to January in the North.
- RED CANADA—(Steele's Red)—Medium size; red with white dots; flesh rich, sub-acid and delicious. Tree a *moderate*, slender grower. A superior fruit for table or market. November to May.
- RHODE ISLAND GREENING—Everywhere well-known and popular; tree spreading and vigorous; always more or less crooked in the nursery; a great and constant bearer in nearly all soils and situations; fruit rather acid, but excellent for dessert and cooking. Toward the South it ripens in the fall, but in the North keeps well until March or April.
- **ROXBURY RUSSET**—Medium size to large; surface rough; greenish, covered with russet. Tree a *free* grower, spreading, and a great bearer; keeps till June. Its great popularity is owing to its productiveness and long keeping.
- SUTTON BEAUTY—Fruit medium to large, roundish; skin waxen yellow, striped with crimson; flesh whitish, tender, juicy, sub-acid; quality very good; keeps remarkably well. Tree a *free*, handsome grower, and productive.
- TOLMAN'S SWEET—Medium size; pale, whitish yellow, slightly tinged with red; flesh firm, rich and very sweet; excellent for cooking. Tree a free grower, upright and very productive. November to April.
- TOMPKINS KING—A superb red apple of the largest size and finest quality. Tree a vigorous grower and a good bearer; hardy. November to March.
- TWENTY=OUNCE—A very large, showy, striped apple, of fair quality. Tree a free, spreading grower, and a fine bearer; excellent for baking, and of pleasant flavor, though not rich; very popular in the markets. October to January.
- WAGENER—Medium to large size; deep red in the sun; flesh firm, sub-acid and excellent. Tree a vigorous, handsome, upright grower, and very productive; an excellent variety. December to May.
- WALBRIDGE—Medium size, oblate regular; skin pale yellow shaded with red; flesh crisp, tender, juicy. Esteemed, especially in cold climates, for its hardiness and productiveness. Tree very vigorous. January to May.
- YELLOW BELLFLOWER—Large; yellow, with a tinge of red on the sunny side; flesh crisp, juicy, with a sprightly, aromatic flavor; a beautiful and excellent fruit. Valuable for baking. The tree is a *free* grower and a good bearer. November to April.

NEW APPLES.

BARRY—We take great pleasure in offering this fine new seedling apple. It has been thoroughly tested, so that we have no hesitation in recommending it to our customers as a novelty of sterling merit. Fruit oblate conical, yellow ground marbled with carmine on sunny side; flesh firm, crisp acid; quality good. A great keeper, lasting in perfection till June. Tree a vigorous grower.

BISMARCK-Introduced from New Zealand. Comes highly recommended. Described as follows: Very large, remarkably handsome and showy; flesh yellow, tender, juicy; quality good; extremely hardy and prolific, and bears early. Season November to February.

CRAB APPLES.

- HYSLOP'S-Large; deep crimson; very popular at the West on account of its large size, beauty, and hardiness; October. Tree remarkably vigorous.
- TRANSCENDENT—A beautiful variety of the Siberian Crab; red and yellow. Tree a remarkably strong grower. September.
- WHITNEY-Large, averaging one and a half to two inches in diameter; skin smooth, glossy green, striped, splashed with carmine; flesh firm, juicy, and flavor very pleasant; ripe latter part of August. Tree a good bearer and very hardy; a vigorous, handsome grower, with dark green, glossy foliage.

SELECT PEARS.

The following list includes those which have been well tested and prove valuable. A special list of those which we find particularly well suited to the Quince stock will be found at the end of the general list.

GATHERING PEARS.—One of the most important points in the management of Pears, is to

gather them at the proper time.

Summer Pears should be gathered at least ten days before they are ripe, and Autumn Pears at least a fortnight. Winter varieties, if they will hang so long, may be left until the leaves beginning full. begin to fall.

THIN THE FRUIT.—We cannot urge too strongly the following suggestion: When Pear trees are heavily laden, the fruit should be thinned when about one-third grown; else the fruit will be poor and the trees injured.

STANDARD TREES, for Orchards, are on Pear stocks, and generally of two to three years growth from the bud. The size varies from four feet upwards, according to the growth of the

DWARF AND PYRAMIDAL TREES.—These are on Quince stocks, and can be supplied from two to three years old, from the bud. Those of three years growth bear the first or second year after planting.

SUMMER PEARS.

- BARTLETT—One of the most popular pears; large; buttery and melting, with a rich, musky flavor. A vigorous, erect grower; bears young and abundantly. Middle to last of September.
- CLAPP'S FAVORITE—A splendid pear, resembling the Bartlett and ripening a few days earlier; a cross between that variety and the Flemish Beauty; the tree is vigorous either on the pear or quince. Care should be taken to pick the fruit at least ten days before it would ripen on the tree.
- GIFFARD—A beautiful and excellent variety, ripening middle of August. Tree slender, but healthy; hardy; a moderate grower and very productive.
- MARGARET-Medium size, skin greenish yellow, with brownish red cheek, and covered with greenish dots. Flesh fine, melting, juicy, vinous, and of first quality. Tree a vigorous, upright grower, and an early and abundant bearer. Succeeds admirably as a standard or dwarf. The finest pear of its season, and worthy of special attention. Ripens latter part of August.
- SOUVENIR DU CONGRES-Large to very large; skin smooth, bright yellow when the fruit is fully matured, with the parts exposed to the sun brilliant red or carmine. The flesh is firm to the core. It commences to ripen in August and extends into September. On account of its size, quality, and earliness, it is entitled to a place among the best pears.
- SUMMER DOYENNE—A beautiful, melting, sweet pear, rather small; tree a vigorous grower and good bearer. First of August.
- TYSON—Rather above medium size; melting, juicy, sweet and pleasant. very vigorous and rapid grower; one of the best summer varieties. August.

AUTUMN PEARS.

- ANGOULEME (Duchesse d'Angouleme) The largest of all our good pears. Succeeds well on the pear, but it attains its highest perfection on the quince, and is a beautiful and vigorous tree. October and November.
- BOSC—(Beurre Bosc)—A large and beautiful russety pear; very distinct, with a long neck; melting, or nearly so, high flavored and delicious. A moderate grower and rather irregular; bears well. We top-graft in order to get good standard trees. It does not succeed on the quince, and in order to obtain dwarf trees it must be double-worked. September to October.
- **BOUSSOCK**—A large pear of good quality, resembling the White Doyenne. Tree a very *vigorous*, rapid grower and abundant bearer. September.
- **FLEMISH BEAUTY**—A large, beautiful, melting sweet pear. Tree very hardy, *vigorous* and fruitful; succeeds well in most parts of the country. September and October.
- FREDERICK CLAPP—Size above medium; form generally obovate; skin thin, smooth, clear lemon yellow; flesh fine grained, very juicy and melting, flavor sprightly, acidulous, rich and aromatic; season October 15 to November 1; quality very good to best. Tree a vigorous or free grower, and somewhat spiny. Does best as a standard.
- **HOWELL**—One of the finest American pears; large, handsome; sweet, melting. Tree very *vigorous*, hardy and productive. September and October.
- KIEFFER—Said to have been raised from seed of the Chinese Sand Pear accidentally crossed with Bartlett or some other kind. Large; skin rich golden yellow, sprinkled thickly with small dots and often tinted with red on one side; flesh slightly coarse, juicy, melting, with a pronounced quince flavor. Tree very vigorous and an early and great yielder. October and November.
- LOUISE BONNE OF JERSEY—A large, beautiful, first-rate pear; yellow with a dark red cheek; melting, buttery and rich. Tree a vigorous, erect grower and most abundant bearer; best on the quince. September and October.
- **SECKEL**—The standard of excellence in the pear; small, but of the highest flavor. Tree a stout, *slow*, erect grower. September and October.
- SHELDON—A pear of the very first quality; large, round, russet and red; melting, rich and delicious. Tree vigorous, erect and handsome, and bears well when grown on the pear. It must be double-worked on the quince. October.
- SUPERFIN—A large, fine pear, very juicy and melting, with a rich, pleasant and sprightly, sub-acid flavor; all things considered, one of the best pears known to cultivators. Its valuable qualities are not sufficiently appreciated. Tree vigorous. September and October.

LATE AUTUMN AND WINTER PEARS.

ANJOU—(Beurre d'Anjou)—A large, handsome pear, buttery and melting, with sprightly vinous flavor; keeps into midwinter. Tree a vigorous grower and good bearer. We have no hesitation in pronouncing it to be the most valuable pear in the catalogue. Does equally well as a standard or a dwarf. Keeps until the winter holidays, when it commands very high prices in the market. (See cut on next page.)

The Rural New Yorker says: There are few lovers of pears that, after they have eaten their first well-grown, well-ripened Anjou, do not ask its name with a view to buying more for immediate use, or planting Anjou trees in their own gardens or orchards. If a voteamong all the judges of pears in the country were taken as to which is the best variety of its season, we think that the Anjou would be elected by an overwhelming majority.

- **CLAIRGEAU**—(Beurre Clairgeau)—Very large; pyriform; yellow and red; handsome and attractive; flesh yellowish; nearly melting; keeps sound a long time after being gathered. Tree a *free* grower, and an early, abundant bearer; a magnificent market fruit.
- **EASTER BEURRE**—A large, roundish oval fruit, yellow with a red cheek; melting and rich. Tree a *moderate* grower and most abundant bearer; best *on the quince*; keeps *all winter*.

JOSEPHINE OF MALINES—Medium to large, roundish; pale straw color; flesh rose colored; melting and delicately perfumed; first quality. Tree a moderate, irregular grower, with small leaves; fruit borne in clusters; succeeds well on the quince, though not a handsome grower. This variety improves as the tree advances in age. One of the most delicious of our long-keeping table pears.



ANJOU.—(REDUCED.)

LAWRENCE—Size medium to large, obovate; golden yellow; flesh melting, with a pleasant, aromatic flavor. Tree a *moderate* grower and an abundant bearer; one of the most valuable of all our early winter pears.

WINTER NELIS—One of the best early winter pears; medium size; dull russet; melting and buttery, with a rich, sprightly flavor. Tree a slender, straggling, but free grower. Bears heavy crops regularly. Top-grafted trees.

SPECIAL COLLECTION OF PEARS.

For Cultivation on the Ouince.

Our Dwarf Pear Trees are budded on Ouince stock. Dwarf trees of the following varieties set out here thirty-five years ago are still in a flourishing condition. We specially recommend:

SUMMER—Clapp's Favorite, Margaret.

AUTUMN-Angouleme, Boussock, Howell, Louise Bonne of Jersey, Superfin.

WINTER—Anjou, Easter Beurre, Lawrence, Josephine of Malines.

SELECT CHERRIES.

The Cherry succeeds well on dry soils, and is susceptible of being trained in any form that taste or circumstances may require.

For orchards where there is ample room for large trees, and in climates where it is not subject to the bursting of the bark, standards with four or five feet of clean trunks are preferable.

For door-yards, where shade and ornament are taken into account, standards of the free growing sorts, with erect habit and large foliage, are the most suitable.

For fruit gardens, and particularly those of moderate extent, and in localities where the bark of the trunk is liable to burst, the pyramidal or conical trees, dwarf or low standards. with two or three feet of trunk, and the dwarfs, branching within a foot of the ground, are the most appropriate and profitable. appropriate and profitable.

STANDARD TREES are on Mazzard stocks. The Heart and Bigarreau Cherries are rapid, erect growers, and make large and beautiful trees. The Duke and Morello varieties grow slowly, and do not attain a large size, but are very suitable for dwarfs, and generally more hardy.

HEART CHERRIES.

Fruit heart shaped, with tender, sweet flesh. Tree of rapid growth, with large, soft, droop-

BLACK TARTARIAN—Very large; purplish black; half tender; flavor mild and pleasant. Tree a remarkably *vigorous*, erect, and beautiful grower, and an immense bearer. Ripe last of June and beginning of July. One of the most popular varieties in all parts of the country.

GOV. WOOD-The finest of Dr. Kirtland's seedlings, of Ohio; clear, light red; tender and delicious. Tree a vigorous grower and most productive. End of

June. Hangs well on the tree.

BIGARREAU CHERRIES.

These are chiefly distinguished from the preceding class by their firmer flesh. Their growth is vigorous, branches spreading, and foliage luxuriant, soft, and drooping.

NAPOLEON—A magnificent cherry of the largest size; pale yellow, with a bright cheek; flesh very firm, juicy, and sweet. Tree a vigorous, erect grower, and bears enormous crops. Beginning of July.

TRADESCANT'S BLACK-(Elkhorn)-Very large, black; very firm, juicy, and good. Tree vigorous and upright, with peculiar gray bark. A great bearer, and so late as to be very valuable. Middle of July.

WINDSOR—A seedling originated at Windsor, Canada. Fruit large, liver colored, resembling the Elkhorn or Tradescant's Black, nevertheless quite distinct; ripens three or four days after that variety; flesh remarkably firm and of fine quality. Tree hardy and very prolific. A very valuable late variety for market and for family use.

YELLOW SPANISH—Large; pale yellow, with a bright red cheek in the sun; flesh firm, juicy, and delicious; one of the best, most beautiful, and popular of all light-colored cherries. Tree erect, vigorous, and productive. End of June.

DUKE AND MORELLO CHERRIES.

These two classes of cherries are very distinct from the preceding. The trees are of smaller size, and grow more slowly; the leaves are thicker and more erect, and of a deeper green. The fruit is generally round, and in color varying from light red to dark brown.

The Dukes have stout, erect branches, usually, and some of them, like Reine Hortense, quite sweet fruit; while the Morellos have slender, spreading branches, and acid fruit invariably. These two classes are peculiarly appropriate for Dwarfs and Pyramids on the Mahaleb stock, and their hardiness renders them well worthy of attention in localities where the Heart and Bigarreau are too tender. reau are too tender.

- EARLY RICHMOND -An early red, acid cherry; very valuable for cooking early in the season. Ripens through June. Tree a free grower, hardy, healthy, and very productive.
- MAY DUKE-An old, well-known, excellent variety; large; dark red; juicy, subacid, rich. Tree hardy, vigorous, and fruitful; ripens a long time in succession; fine for dwarfs and pyramids. Middle of June.
- MONTMORENCY ORDINAIRE A beautiful, large, red, acid cherry; larger than Early Richmond, and fully ten days later. Being extraordinarily prolific and very hardy, it can be recommended as a variety of great value. Tree a free
- MORELLO ENGLISH-Large; dark red, nearly black; tender, juicy, sub-acid, rich. Tree dwarf and slender; makes a fine bush on the Mahaleb. If trained on a north wall it may be in use all the month of August.
- REINE HORTENSE—A French cherry of great excellence; large, bright red; tender, juicy, nearly sweet, and delicious. Tree vigorous, and bears well; makes a beautiful pyramid.

SELECT PLUMS.

HOW TO MAKE PLUM CULTURE PROFITABLE.

DISEASES AND ENEMIES OF THE PLUM.

The prevalence of that disease of the Plum commonly called "black knot," and of the insect The prevalence of that disease of the Plum commonly called "black knot," and of the insect known as the curculio, has of late discouraged people generally from giving to the Plum its merited share of attention. It is not to be denied that these are obstacles of considerable magnitude to indifferent, slovenly cultivators; but we are satisfied from actual experience, that nothing more than ordinary industry and perseverance is required to overcome them entirely.

Nothing is more favorable to the growth of the black fungus, or knot than neglect. We have seen trees growing in grass in some uncultivated dooryards, transformed into a mere mass of black knots, while trees in neighboring gardens, under good cultivation were entirely exempt. The preventive and remedies are good, clean culture and prompt amputation.

As for the queuello, there is no difficulty in protecting the eron from it by merely employing

As for the curculio, there is no difficulty in protecting the crop from it by merely employing a little extra labor. When the trees blossom, and as the fruit begins to set, dress the ground about the Plum Trees, and make it very clean and smooth. Then, as soon as the curculio commences its operations, spread a large sheet prepared for the purpose around each tree, and jar it so as to shake down all fruits that have been stung, as well as all the curculios. Both insects and stung fruits are destroyed. This work performed daily, ensures a full crop. The work can be done quickly; a dozen trees in a garden can be attended to daily in less than half an hour's work of a man. Let those who really desire to grow fine crops of delicious plums try this system and follow it up rigidly, and they will be successful.

- **ABUNDANCE**—Of Japanese origin. Fruit, large, and beautiful; amber, turning to a rich, bright cherry; flesh light yellow, juicy, tender, sweet; exceedingly productive. Season very early.
- BAVAY'S GREEN GAGE—(Reine Claude de Bavay)—One of the best foreign varieties; as large as the Washington, and of fine flavor; roundish oval; greenish, marked with red in the sun. Tree a free grower and remarkably productive. Middle to end of September. Hangs long on the tree.
- BRADSHAW—A very large and fine early plum; dark violet red; juicy and good. Tree erect and vigorous; very productive.
- BURBANK—Another Japanese plum. Large and beautiful; clear cherry red; an abundant bearer. Valuable market variety. Ripens early in September.
- COE'S GOLDEN DROP—Large and handsome, oval; light yellow; flesh firm, rich, and sweet; adheres to the stone. Tree a moderate grower and very productive. Valuable not only on account of its large size and fine appearance, but its lateness. Last of September.
- FELLEMBERG-(French or Italian Prune)-A fine late plum; oval, purple; flesh juicy and delicious; parts from the stone; fine for drying. Tree a free grower and very productive. September.
- GERMAN PRUNE—Medium; oval; purple or blue; juicy, rich, fine. Tree vigorous and very productive. September.
- GRAND DUKE—(New)—A valuable addition to late plums; as large as the Bradshaw, of same color, and ripening latter part of September. One of the best plums for market. (See next page.)
- IMPERIAL GAGE—Rather large; oval; greenish; flesh juicy, rich, and delicious; parts from the stone. Tree a vigorous grower; very productive. Middle of August.



A YOUNG BEARING TREE OF THE GRAND DUKE PLUM.

- LOMBARD-Medium size; oval; violet red; flesh yellow, juicy and pleasant. Tree very vigorous, a great bearer, and peculiarly well adapted to light soils. September.
- McLAUGHLIN—Large, round; greenish yellow; sugary and fine; first-rate. Tree a free grower. Middle of August.
- PETER'S YELLOW GAGE—Large, nearly oval; bright marbled yellow; flesh rich and juicy; very good. Tree a free grower. September.
- POND'S SEEDLING OR FONT HILL-A magnificent English plum; form of Yellow Egg; light red, changing to violet; flesh rather coarse. Tree a vigorous grower and most abundant bearer. One of the most attractive in cultivation. September.
- PRINCE ENGELBERT-Very large and long; deep purple; rich and excellent. Tree very vigorous. One of the best. End of August.
- SHROPSHIRE DAMSON-A medium size, dark purple variety; esteemed for preserving. Tree vigorous and very productive. October.
- VICTORIA-(Sharp's Emperor)-One of the most magnificent plums in cultivation; of the largest size, fair quality; purplish red color. Tree a free, irregular grower and most abundant bearer. September.
- WASHINGTON A fine large plum; roundish; green, usually marked with red; juicy, sweet and good. Tree robust and exceedingly productive. End of August.
- WICKSON-One of Mr. Burbank's celebrated hybrids, and considered by him one of the finest. "Very large, glowing carmine, with a heavy white bloom; flesh firm, sugary, delicious; stone small. Remarkable for its long-keeping Tree of vigorous, upright growth.
- YELLOW EGG-A very large and beautiful egg-shaped yellow plum; a little coarse, but excellent for cooking. Tree a free grower and very productive. End of August.

SELECT PEACHES.

To secure healthy, vigorous, and fruitful trees and fine fruit, the following points must be well attended to in peach culture: 1st—Keep the ground clean and mellow around the trees, and give it an occasional dressing of wood ashes. 2nd—Keep the heads low—the trunks ought not to exceed three feet in height. 3rd—Attend regularly every spring to pruning and shortening the shoots of the previous year's growth. This keeps the head round, full, and well furnished with bearing wood. Cut weak shoots back about one-half, and strong ones one-third; but see that you have a sufficient supply of fruit buds. Sickly and superfluous shoots should be cut out clean.

It should always be borne in mind that the fruit is produced on wood of the last season's growth and bence the pecessity for keeping up a good support groups annual shoots all over

growth, and hence the necessity for keeping up a good supply of vigorous annual shoots all over

the tree.

Note.—In planting peaches, it is of the highest importance to cut back the trees severely. The stem should be reduced about one-third, and the side branches cut back to one bud. This lessens the demand upon the roots and enables the remaining buds to push more vigorously. Most failures in newly planted orchards may be ascribed to a non-observance of these directions.

THE VARIETIES MARKED (C) ARE CLINGSTONES, THE OTHER VARIETIES ARE FREESTONES.

- ALEXANDER (C)-Medium to large size; skin greenish white, nearly covered with deep, rich red; flesh melting, juicy, sweet. Tree vigorous and productive; ripens two weeks before Hale's Early; one of the largest and best of the extra early varieties, and valuable for market as well as for home use.
- CHAMPION-A new early peach; large, handsome, creamy white with red cheek; sweet, rich, juicy; freestone. Hardy and productive.
- CONKLING-Large and handsome; yellow, marbled with crimson; flesh pale yellow, very juicy, sweet, vinous, and very good; equal to any yellow peach we know of. Tree vigorous, and yields heavy crops; succeeds Crawford's Early.
- COOLIDGE'S FAVORITE-A most beautiful and excellent peach of medium size; skin white, delicately mottled with red, flesh pale, juicy and rich. Tree vigorous and productive. End of August.
- CRAWFORD'S EARLY-A magnificent large, yellow peach, of good quality. Tree exceedingly vigorous and prolific; its size, beauty and productiveness make it one of the most popular varieties. Beginning of September.

- **CRAWFORD'S LATE**—A superb yellow peach; very large, productive and good; ripens here about the close of the peach season. Last of September.
- CROSBY—Fruit medium, roundish, slightly flattened; bright orange yellow, splashed with streaks of carmine on sunny side; good in quality. Ripens between Crawford's Early and Late.
- ELBERTA—Originated in Georgia a few years ago, and has proved to be one of the most valuable of the newer varieties. The fruit is large, handsome, with golden yellow skin, covered with a bright crimson blush. Flesh yellow, juicy; quality good, though not quite equal to Crawford. A peculiarity of the Elberta is that the fruit can be gathered before it is ripe, and it will ripen up without rotting. It bears transportation well, and, taken all in all, is a variety of great promise.
- FOSTER—A large yellow peach resembling Crawford's Early, but of better quality. Ripe about the same time as Crawford's Early, or a little earlier.
- HALE'S EARLY (C)—Medium size; flesh white, first quality; ripens middle of August.
- HILL'S CHILI—Medium size; skin deep yellow, shaded with dark red; of medium quality. Tree hardy, vigorous, very productive; a good market sort; ripens between Crawford's Early and Late.
- LARGE EARLY YORK (C)—A large and beautiful variety; white, with a red cheek; flesh juicy and delicious. Tree *vigorous* and productive. End of August.
- MORRIS WHITE—Medium size; dull creamy white, tinged with red in the sun: flesh white to the stone, juicy and delicious. Tree a moderate bearer; highly prized for preserving on account of the entire absence of red in the flesh. Middle of September.
- MOUNTAIN ROSE—Large, roundish; skin whitish, nearly covered with dark red; flesh white, juicy, very good; freestone. Tree vigorous and very productive. An excellent early market variety.
- **OLDMIXON FREE**—Large; greenish white and red; flesh pale, juicy and rich. Tree hardy and productive; a most valuable variety. Middle of September.
- RIVERS—Large; color creamy white, with a delicate pink cheek; flesh melting, or rather dissolving, with a rich, racy flavor most remarkable. One of the finest of the early peaches for amateur's use and market.
- STUMP THE WORLD (C)—Large; red and white, handsome; good size and fair quality. Very productive, End of September.
- WHEATLAND—Large, roundish; skin golden yellow, shaded with crimson on the sunny side; flesh yellow, rather firm, juicy, sweet, and of fine quality. Ripens between Early and Late Crawford. Tree vigorous and healthy.

SELECT APRICOTS.

The Apricot is one of the most beautiful and delicious fruits we possess, and its value is greatly enhanced by the season of its ripening—between cherries and peaches.

In a selection of choice garden fruits, it is quite indispensable. It succeeds admirably trained in Espalier form, which will be found advantageous in small gardens, as it may occupy a house wall, fence or trellis, leaving the open ground for other trees. In cold sections, too, where the trees get winter killed, or the blossoms injured by the late spring frosts, these Espalier trees can easily be protected by mat or board screens. To protect against the curculio, see directions for the Plum.

ALBERGE DE MONTGAMET—Medium size; very early; juicy and excellent; very hardy; one of the best. Ripe in July.

EARLY MOORPARK—Medium size; rich, juicy, very fine.

LARGE EARLY MONTGAMET—Large, early; firm, juicy, excellent.

MOORPARK—One of the largest and finest Apricots; yellow, with a red cheek; flesh orange, sweet, juicy and rich; parts from the stone; very productive.

PEACH—Very large, handsome, rich and juicy; one of the best.

ST. AMBROISE—One of the largest and finest Apricots, ripens beginning of August.

SELECT NECTARINES.

The Nectarine requires the same culture and management as the peach, from which it differs only in having smooth skin like the plum. It is peculiarly liable to the attacks of the curculio. The same remedy must be applied as recommended for the plum.

Our collection embraces the finest varieties.

ar concesion emoraces one mest varieties.

SELECT QUINCES.

- APPLE OR ORANGE—Large, roundish, with a short neck; of a bright golden yellow color; tree has rather slender shoots and oval leaves; very productive. This is the variety most extensively cultivated for the fruit. Ripe in October.
- **CHAMPION**—A variety which ripens late. The tree bears early and abundantly, and is vigorous.
- REA—(Rea's Mammoth)—A very large and fine variety of the Orange Quince.

 A strong grower and productive. We consider this the best of all quinces.

HARDY NATIVE GRAPES.

BLACK GRAPES.

- BARRY—(Rogers' No. 43)—Bunch large but rather short; berries large, roundish, much like Black Hamburg; delicate, sweet and tender. Ripens with Concord. Vine vigorous and productive. One of the largest and finest of the Rogers' Hybrids.
- **CAMPBELL'S EARLY**—A fine new grape raised by the late George W. Campbell of Delaware, Ohio. Clusters large, compact and handsome; berries large, nearly round, black, with light purple bloom; flesh rather firm, but tender; the seeds are few and easily separated from the pulp; quality rich, sweet, slightly vinous; a strong and vigorous grower, with healthy foliage; it ripens very early; the berries do not drop easily from the clusters, and the fruit keeps a long time in perfection; promises to be of great value.
- **CHAMPION**—A large grape, of medium quality. Its chief value consists in its earliness, rendering it a valuable sort to plant where the seasons are short.
- **CLINTON**—Bunches small and very compact; berries small, sprightly; when thoroughly ripe is a good table grape and keeps well; valuable for wine. A free, rapid grower and profuse bearer; ripens earlier than the Isabella.
- **CONCORD**—A large, handsome grape, ripening a week or two earlier than the Isabella; very hardy and productive; succeeds well over a great extent of country, and is one of the most popular market grapes.
- EATON—Bunch large, compact. Berries very large, round, black, covered with a thick blue bloom. In general appearance of the bunch and berry it strongly resembles Moore's Early. Skin thick; very juicy with some pulp. A large, showy grape.
- HARTFORD—A hardy, profuse bearing, and tolerably good grape, ripening very early, and a valuable market variety on this account.
- HERBERT—(Rogers' No. 44)—Bunch rather long, but compact; berry large, tender, sweet, and rich; early and productive. A handsome variety and one of the best of the Rogers' in quality.
- **ISABELLA**—Bunches long, large, loose; berries large, oval, juicy, sweet, and musky. A vigorous grower, hardy, an immense bearer; a good keeper.
- MERRIMACK—(Rogers' No. 19)—Bunch medium to large; berry large, sweet, and rich; vigorous and productive; one of the earliest of the Rogers' varieties,
- MILLS—Bunch very large, compact, shouldered, some clusters weighing over twelve ounces. Berry large, round, jet black, covered with a thick bloom; flesh firm, meaty, juicy, breaking with a rich, sprightly flavor. Skin thick; berries adhere firmly to the peduncle. Vine vigorous and productive; foliage large and healthy. Ripens about with the Concord, or a little later, and is a long keeper.

MOORE'S EARLY-Bunch medium; berry large, round, black, with a heavy blue bloom; flesh pulpy and of medium quality; vine hardy and moderately prolific; ripens with the Hartford. Its large size and earliness render it desirable for an early crop.

WILDER—(Rogers' No. 4)-Bunch very large, compact, shouldered; berry large, round, black; flesh tender, slight pulp at center, juicy, sweet. Ripens about with Concord. Vine vigorous, hardy and a good bearer. Regarded as one of the best of the black varieties, and on account of its size and beauty is very valuable for market.

WORDEN-Said to be a seedling of the Concord. Bunch large, compact, handsome; berries large—larger than those of the Concord. It ripens a few days earlier, and is superior to it in flavor. Destined to become very popular for the vineyard and garden.

RED AND REDDISH PURPLE GRAPES.

- AGAWAM—(Rogers' No. 15)—One of the best of the red varieties; bunch variable in size; sometimes large and handsome; flesh tender and juicy. Vine a good grower and bearer.
- **BRIGHTON**—Resembles Catawba in color and in size and form of bunch and berry. Flesh rich, sweet, and of the best quality, equal if not superior to Delaware; ripens early. Vine vigorous, but in some locations is subject to mildew.
- CATAWBA—Well known as the great wine grape of Ohio, Kentucky, etc.; bunches large and loose; berries large, of a coppery red color, becoming purplish when well ripened; two weeks later than the Isabella; requires the most favored soils and situations, good culture, and warm seasons to mature perfectly in Western New York.
- DELAWARE-This variety has fully maintained its reputation as one of the finest of our native grapes. The vine is comparatively slender, but grows freely. It proves quite hardy in this climate, and ripens two or three weeks before the Isabella. Bunch small and compact; berries small, light red with a violet bloom; beautiful. Sweet, sugary, and vinous, with a musky aroma. It justly claims a place in every garden.
- GÆRTNER-(Rogers' No. 14)-Bunch large; berry very large, round; skin thick; color a beautiful light red with bloom; fruit almost transparent; pulp tender, sweet, pleasant, rich. The most showy grape in our collection. Vine vigorous and productive. Desirable either for the garden or vineyard.
- IONA—Bunch medium to large, shouldered; flesh soft, tender, juicy, brisk subacid; high-flavored, refreshing; keeps till midwinter with its freshness unimpaired. In this locality one of the finest table grapes. Should be in every garden where the climate admits of it being ripened. It must not be allowed to overbear.
- LINDLEY—(Rogers' No. 9)—Bunch medium, somewhat loose; berry medium to large, round, color a rich shade of red, rendering it a very handsome and attractive grape; flesh tender, sweet, with a rich aromatic flavor; ripens soon after the Delaware; vine vigorous and productive. It sometimes fails to set a full crop. We regard it as one of the best red grapes in our collection.
- MASSASOIT—(Rogers' No. 3)—Bunch medium, rather loose; berry medium; flesh tender and sweet; very good; one of the best flavored of the Rogers'. Early as Hartford. A desirable garden variety.
- SALEM-(Rogers' No. 53)—Bunch large, compact; berry large, round, coppery red; flesh tender, juicy; slight pulp; in quality one of the best. Ripens with Concord. Vine healthy, vigorous, and productive. One of the most popular of the Rogers'.
- **VERGENNES**—Bunch of medium size, somewhat loose, not uniform; berry large, round; skin thick, tough, red, overspread with a thick bloom; flesh quite pulpy, flavor pleasant, but not rich. Vine vigorous, hardy, healthy, and productive. Ripens with Concord. Keeps well. Possesses qualities which render it desirable in some localities.

WHITE GRAPES.

DUCHESS—Bunch medium to large, long, shouldered, compact; berries medium, roundish; skin thick, generally dotted with small black spots about the size of a pin's head; color light green at first, becoming greenish yellow when ripe, fruit almost transparent; flesh tender without pulp, juicy, sweet, crisp, rich, and in quality ranks as best. Vine vigorous and productive here. The foliage is said to mildew in some localities. Ripens early before the Concord.

MOORE'S DIAMOND—A pure native, bunch large, compact; berry medium size; color greenish white with a yellow tinge when fully ripe; flesh juicy and almost without pulp; quality very good. Vine vigorous and productive.

NIAGARA—Bunch medium to large, compact, occasionally shouldered; berry large, roundish, uniform; skin thin, but tough, pale green at first, changing to pale yellow when fully ripe, with a thin, whitish bloom; flesh slightly pulpy, tender, sweet, not quite equal to the Concord. Before it is fully matured it has a very foxy odor, which disappears, to a great extent, later. Vine remarkably vigorous, healthy, and productive; foliage thick and leathery. Ripens with the Concord. All things considered, probably the most valuable white grape in cultivation.

POCKLINGTON—A seedling of the Concord. Bunch medium to large, generally shouldered; berry large, roundish, light golden yellow when fully mature; flesh pulpy, juicy, of fair quality; vine very hardy, healthy, vigorous, and productive; leaves large, tough, and downy; ripens after the Concord. It will require favorable seasons and good locations to ripen it satisfactorily in this region.

WINCHELL—The earliest white grape (identical with Green Mountain). This white grape has been thoroughly tested for several years, and it has proved so satisfactory in all respects that we can recommend it with the utmost confidence to our customers. It combines hardiness, fruitfulness, vigor, good size, and excellent quality. Though not the largest, yet both berry and cluster are of good size, and the flavor is excellent, ranking in this respect as a grape of the first class. In time of ripening it may be described as very early, being the first white grape to ripen, and maturing about the same time as Champion, or about a week earlier than the Hartford. This qualification insures its ripening even in the worst of seasons, a consideration which will be appreciated by all planters. Its habit of growth is vigorous and the foliage clean and healthy, while its bearing quality is all that can be desired. It can be said to be a most valuable white grape, either for the amateur or professional grower, and there is every reason to believe that it is destined to widespread popularity. We think that it is one of the few grapes adapted to general cultivation, and of especial value for the amateur, while its earliness, productiveness, and vigor, combined with fine quality, in our opinion render it also very desirable for market.

BLACKBERRIES.

In the garden, plant in rows about five feet apart, and four feet apart in rows. In the field, plant in rows 6 feet apart and 3 feet in the rows. Treat the same as Raspberries. They may be planted in the Fall or Spring.

AGAWAM—Of medium size, jet black, sweet, melting to the core. Plant hardy and very prolific. A fine early variety.

ANCIENT BRITON—Medium size, melting, without core. Hardy and very prolific. One of the best.

EARLY KING—Fruit of medium size and good quality, plant hardy and productive. The first variety to ripen here, and particularly valuable on that account.

ERIE-Fruit large, of good quality; plant hardy, vigorous and productive. Early.

KITTATINNY—Large, roundish, conical, glossy black, juicy, sweet, excellent when fully ripe; one of the most valuable sorts for general planting. Requires protection in some localities.

LAWTON OR NEW ROCHELLE—Large, oval, black, juicy, sweet, excellent when fully ripe; well known.

SNYDER—Medium size, sweet and melting to the core; very hardy and wonderfully productive; valuable for home use and market.

TAYLOR—As hardy as the Snyder; large and of excellent quality.

WILSON, JR.-Large, luscious, and sweet, as soon as colored. Plant hardy; ripens early; productive.

DEWBERRY.

LUCRETIA—A trailing variety of the Blackberry, ripening between the Raspberry and Blackberry. Fruit large and handsome.

CURRANTS.

This is a very profitable and desirable crop, both for market and family use. None of the small fruits will remain so long on the bushes without injury as the Currant, and since the introduction of the newer varieties and the easy method of destroying the Currant worm by the use of powdered White Hellebore, it is justly attracting more attention than before. The Cherry, Fay's or Versaillaise is from three to five times larger than the old sorts and far more productive. Four tons, or 200 bushels per acre, selling in market for over \$800, have been realized from this fruit. They can be successfully grown among orchard trees where the ground is kept clean and in a good state of cultivation.

BLACK CHAMPION—A variety from England. The bunches are large and the fruit of good quality.

BLACK ENGLISH-Well known; esteemed by many for jellies.

BLACK NAPLES—Similar in appearance and flavor to Black English, but larger and every way finer.

CHERRY—One of the largest red currants; bunches short; plant vigorous and productive.

FAY'S PROLIFIC—A fine red currant, larger than the Cherry, and with longer clusters.

LEE'S PROLIFIC-Larger than Black Naples and very productive.

PRINCE ALBERT—Berry large, light red, bunch long; an erect grower and immense bearer; foliage distinct; ripens late; valuable.

RED DUTCH—An old, well-known sort; berry of medium size and of good quality; bunch long, plant an upright grower and very prolific.

SHORT BUNCHED RED OR LONDON RED--A strong, upright grower, with large berries and short bunches; grown for market around London. A good sort.

VERSAILLAISE— (La Versaillaise)—A French variety, resembling the Cherry; of very large size, great beauty, and productiveness.

VICTORIA—Large, bright red; bunches very long; an erect grower; late, productive, and very valuable. This and Prince Albert extended the currant season into September.

WHITE DUTCH-Well known, of medium size and excellent quality.

WHITE GRAPE--Very large, mild, and excellent; the best table variety. This is very distinct from the White Dutch.

GOOSEBERRIES.

The Gooseberry wants annual manuring to sustain its vigor. The American varieties need close pruning every year. The English kinds require but little pruning. They may be planted in the Fall or Spring.

ENGLISH VARIETIES.

CROWN BOB-Large, roundish, oval, red, hairy; of first quality.

INDUSTRY—Large, oval, dark red, hairy; rich and agreeable. Although this is a foreign variety, it has succeeded admirably on our grounds, where it has fruited extensively for several years. We can confidently recommend it, both for the garden of the amateur and the market plantation. The plant is remarkably vigorous and productive, and the fruit large, beautiful, and of excellent quality. Where shoots are left long, they fruit to the very tips. We regard it, on the whole, as the best foreign Gooseberry ever introduced.

WHITESMITH-Large, roundish, oval; yellowish white, slightly downy; of first quality.

AMERICAN VARIETIES.

COLUMBUS—This is one of the most valuable introductions of recent years in small fruits, and it fully sustains the high opinion first formed of it, as will be seen from the report given below from high and competent authority. It was introduced a few years ago. The fruit is of largest size, handsome, of a greenish yellow color, and the quality is excellent. The plant is vigorous and productive and does not mildew. It merits a place in every garden. (See cut.)

The editor of the Rural New-Yorker says: "It is the best variety yet introduced and seems close to a perfect Gooseberry for our climate."



DOWNING-A seedling of Houghton. Fruit large, two or three times the size of Houghton; whitish green; flesh soft, juicy, good; plant vigorous and prolific; excellent for family use, and very profitable for market.

HOUGHTON-A vigorous grower; branches rather slender; very productive; not subject to mildew; fruit of medium size; skin smooth, pale red; flesh tender

and good.

SMITH'S-(Smith's Improved)-Grown from the seed of Houghton; fruit large, oval; light green; flesh moderately firm, sweet, and very good; plant vigorous and productive.

RASPBERRIES.

To keep a raspberry bed in good productive condition, the old, weak, and dead wood should be cut out every season, to give strength to the young shoots for the next year's bearing. In spring the weakest suckers should be removed, leaving five or six of the strongestin each hill. The ground should be spaded and a top dressing of manure given.

PROTECTION.—To guard against injury by the winter, the canes may be tied to stakes and covered with straw, or they may be laid down in the autumn and covered with a few inches of earth, leaves, litter, or branches of evergreens.

They can be planted in the fall or spring with success. Black Caps should not be planted in the fall

the fall.

FOREIGN VARIETIES AND THEIR SEEDLINGS AMERICAN ORIGIN.

All the varieties in this class require protection in winter.

- ANTWERP—Yellow or White -Fruit large, pale yellow; sweet and rich; a beautiful and excellent fruit; canes thickly covered with greenish spines.
- CHAMPLAIN-(New)-Originated from seed of the White Antwerp, which it resembles in color and size of fruit. A stronger grower and more prolific than the parent. In quality ranks as best; superior to Golden Queen. Valuable for the amateur.
- CLARKE-Large, light red; moderately firm; high flavored; a strong grower; productive and very hardy. One of the best red raspberries for home use.
- HERSTINE-Fruit large; oblong; crimson; moderately firm; juicy; flavor subacid and very good; an abundant bearer; season early to medium; one of the best.

NEW RED RASPBERRY.

SUPERLATIVE—A splendid new foreign red raspberry. Very large, fine color, firm and of best quality. We have tested it in our grounds, and commend it to all who desire the largest, handsomest and choicest fruit. One of the best novelties in this line. Liable to injury during severe winter.

AMERICAN SPECIES AND VARIETIES.

- COLUMBIAN—Fruit very large, dark red, bordering on purple; plant a very strong, robust grower, hardy and wonderfully productive.
- **CUTHBERT**—(Queen of the Market)—Medium to large, conical; deep, rich crimson; very firm; a little dry, but sweet and good nevertheless; very hardy. Season medium to late; unquestionably one of the best varieties for market.
- GOLDEN QUEEN—Large, beautiful amber color; firm and of fine quality. Plant vigorous, hardy, and remarkably productive.
- **GREGG**—One of the most valuable varieties of the Black Cap family; fruit large; hardy; a vigorous grower and great yielder.
- KANSAS-A splendid new Black Cap; very large, handsome, firm, and of excellent quality; early, very hardy, and productive. One of the best.
- LOUDON—A new red raspberry which originated at Janesville, Wis. Said to be a seedling of the Turner crossed with Cuthbert. Large, broadly conical, beautiful red. Ripens about with Cuthbert, continuing later, and in quality fully as good as that variety.

MARLBORO-The best early red raspberry for the North; hardy and productive.

OHIO —A variety of the Black Cap much esteemed for drying; plant hardy and prolific; fruit of good quality.

SHAFFER'S COLOSSAL—Fruit large, purple, soft, with a sprightly sub-acid flavor; plant very vigorous, hardy, and productive. Much esteemed in some localities. Season medium to late.

THOMPSON'S EARLY PROLIFIC—Recommended for its early ripening. Berry medium size, red, vigorous and productive.

MISCELLANEOUS FRUITS.

ALMOND-Sweet Hard Shell.

Soft Shell.

CHESTNUT-Common American.

Japan.

Spanish, or Marron.

For descriptions of these three varieties, see page 27.

MULBERRY-Downing's Everbearing-Large, purplish black fruit.

New American—One of the best; hardy, fruit of excellent quality.

White-Mostly cultivated to feed the silk-worm; fruit small and white.

WALNUT-American Black.

American Butternut.

English or Madeira Nut.

English Dwarf Prolific (Preparturiens).

For descriptions of the Walnuts, see page 34.

ESCULENT ROOTS.

ASPARAGUS - Conover's Colossal.

Palmetto.

RHUBARB-Myatt's Linnæus, the largest and best of all.

DIRECTIONS FOR PLANTING ASPARAGUS.

Prepare the ground by trenching to the depth of two feet, mixing each layer of soil, as turned over, with two or three inches of well rotted manure. For private use or for marketing on a small scale, beds should be formed 5 feet wide, with three rows planted in each; one in the middle, and one on each side, a foot from the edge; the distance of the plants in the rows, 9 inches; the alleys between the beds should be two feet wide. In planting, a line is set and a cut made, a little slanting, to the depth of 6 or 8 inches, according to the size of the plants. The plants are then laid against the side of the trench, at the distance already named—9 inches—care being taken to properly spread the roots. The crown or top of the plant should be covered about 2 inches. In a week or so after planting the beds should be touched over lightly with a sharp steel rake, which will destroy the germinating weeds.—Gardening for Profit.

ORNAMENTAL DEPARTMENT.

BRIEF SUGGESTIONS TO PLANTERS.

WHAT TO PLANT.

In this and similar climates, where great extremes of temperature are experienced, it is necessary to employ only the most hardy ornamental trees and shrubs. Impressed with the importance of this fact, and in order that our customers may be spared much disappointment and expense, we have omitted from our catalogue, as far as possible, everything which is liable to suffer from severe cold.

For Parks and Extensive Grounds.—No difficulty can be experienced by any one in making selections for this purpose. But we cannot impress too strongly upon planters the importance and value of flowering shrubs for effective masses and groups. There are many who imagine that the Rhododendron and Azalea are indispensable. This is a great error. In this latitude both Rhododendron and Azalea require prepared soil and protection, while hardy shrubs like the Weigela, Deutzia, Spiræa, Hardy Hydrangea, Japan Quince, Double-flowering Almond, Lilac, Viburnum, Althæa, and plants like the Pæony, Phlox, etc., when planted in masses, produce a magnificent effect, need no protection, and demand little skill or care in their management. What grand masses of bloom can be had throughout the season by a proper use of the various families! Then the purple and variegated-leaved trees and shrubs may also be planted in such a manner as to afford a rich and striking contrast.

Groups of flowering trees form superb objects at the blossoming season, and it is strange that planters do not employ them more.

Highly effective groups can be formed of trees and shrubs possessing brightcolored bark in winter.

For Lawns and Small Places.—Whatever specimens are planted should be of the finest species, of moderate size, of graceful habits of growth and handsome foliage.

A pendulous tree or one with variegated foliage may be occasionally introduced, and will add to the beauty of the grounds. Depend mainly upon dwarf shrubs for small places, and in selecting aim at securing a succession of bloom. Dwarf evergreens are very useful, and in small grounds hardy herbaceous border plants can be used with the most satisfactory results; a proper selection will afford as much bloom as ordinary bedding plants, and at half the trouble and expense.

WHEN TO PLANT.

Deciduous Trees, Shrubs and Vines can be planted either in Spring or Fall. In localities where the winters are very severe we recommend Spring planting. Spring is the best time for evergreens generally.

HOW TO PLANT.

Preparation of the Roots.—Cut off smoothly all bruised or broken roots up to the sound wood. This prevents their decaying and hastens the emission of new roots and fibres.

Preparation of the Top.—This consists in cutting back the top and side branches in such a way as to correspond with the more or less mutilated roots, as follows:

Trees with branching heads, should have the small branches cut clean out, and the larger ones, intended for the frame work of the tree, cut back to within two or three buds of their base.

In cases where there is an abundant root, and small top or few branches, the pruning need be very light, but where the roots are small and the top heavy, severe pruning will be necessary. These remarks are applicable to all deciduous Trees and Shrubs. Evergreens seldom require pruning, but Arbor Vitæ and other Evergreens planted in hedge rows may be advantageously shorn immediately after planting.

Directions for planting, mulching, staking and after culture, same as for fruit trees (see Hints in Fruit Department).

PRUNING.

Pruning, as practiced by some people, has the effect to render trees and shrubs unnatural and inelegant. We refer to the custom of shearing trees, particularly conifers, into cones, pyramids and other unnatural shapes. Every tree, shrub and plant has a habit of growth peculiar to itself, and this very peculiarity is one of its beauties. If we prune all trees into regular shape we destroy their identity. The pruning knife, therefore, should be used to assist nature, and handled with judgment and care; to lop off straggling branches, to thin the head of a tree which has become too dense, and to remove dead wood. Sometimes it becomes necessary to prune severely to keep a tree from attaining too great size.

. Shearing may be practiced on hedges, but never on trees or shrubs.

PRUNING SHRUBS.

Many persons trim and shear them into regular shapes, imagining that regular outline adds to their effect and beauty. While symmetry and regularity of form are to be admired in a shrub, this quality should never be gained at the expense of health and natural grace.

Each shrub has peculiarities of habit and foliage, and we should aim to preserve them as far as possible. Judicious pruning to secure health and vigor is necessary, but trimming all kinds of shrubs into one form shows a lack of appreciation for natural beauty, to say the least. Weigelas, Deutzias, Forsythias and Mock Orange, flower on the wood of the preceding year's growth, hence these shrubs should not be pruned in winter or spring, but in June, after they have finished flowering, when the old wood should be shortened or cut out, thus promoting the growth of the young wood, which is to flower the following season.

Spiræas, Lilacs, Althæas, and Honeysuckles may be trimmed during the winter or early in spring, but the branches should only be reduced enough to keep them in good shape. The old growth should be occasionally thinned out and the suckers and root sprouts removed when they appear. The best time, however, for pruning all shrubs is when they have done flowering. The Hydrangea paniculata grandiflora should be severely cut back and thinned early in spring.

PRUNING EVERGREENS.

Use the knife occasionally to thicken the growth and preserve the shape. This can be done in April or May, just before the trees start to grow.

RARE AND CHOICE

DECIDUOUS ORNAMENTAL TREES,

SUITABLE FOR

LAWNS, AVENUES, PARKS, CEMETERIES, ETC.

ALDER—European—A remarkably rapid growing tree; foliage roundish, wedge-shaped and wavy. This species is specially adapted to moist situations.

AMELANCHIER—Botryapium—An American species; flowers white, produced in great profusion, early in April. One of the finest very early flowering trees.

ASH—Aucuba-Leaved—Beautiful gold-blotched foliage; as the variegation is permanent the tree is valuable for grouping with purple-leaved trees.

American White--A well-known native tree.

European-A lofty tree of rapid growth.

Silver Margined-Leaved—A medium-sized tree; leaves deep green, with margins silvery white.

ALMOND-Large Double-Flowered—A vigorous beautiful tree, covered in May with double rose-colored blossoms; like small roses.

BEECH—Cut=Leaved—A fine, erect tree, with deeply incised foliage; a variety of rare beauty and excellence.

Purple-Leaved—In spring, foliage is deep purple, later in season, changes to crimson, and again to a dull purplish-green in the fall.

Rivers' Smooth-Leaved Purple—A compact, symmetrical grower; crimson foliage in early spring, changing to dark purple in summer. The finest of all purple-leaved trees.

BIRD CHERRY—European—A rapid growing, beautiful tree, with glossy foliage and long bunches of white, fragrant flowers in May, succeeded by clusters of fruit like black currants.

BOX ELDER--See Ash-leaved Maple.

BUCKEYE-See Horse Chestnut.

CATALPA—Speciosa—A showy, rapid-growing, spreading, irregular tree, with large, heart-shaped leaves and pyramidal clusters, a foot long, of white and purple fragrant flowers. Blooms in July. Hardy and fine.

CHERRY—Large Double-Flowered—A remarkable and beautiful tree. At the period of flowering it is literally a mass of bloom, and each bloom represents

a miniature white rose.

CHESTNUT—American—The well-known native variety. A stately tree, with broader leaves than the Spanish, and producing smaller fruit. When in full bloom, one of the handsomest trees.

Japan-Habit and foliage like Spanish Chestnut; fruit very large.

Spanish or Marron—Originally introduced from Asia Minor into Europe. A valuable species both for ornament and fruit. It forms a handsome lawn tree, and produces much larger fruit than the American variety.

CRAB—Bechtel's Double-Flowered, American—One of the most beautiful of the many fine varieties of flowering Crabs. Tree of medium size, covered in early spring with large, beautiful, double, fragrant flowers of a delicate pink color. From a distance the flowers have the appearance of small Roses. A great acquisition, and certain to become very popular as soon as known. Blooms when quite young. (See cut, page 28.)

Chinese Double White-Flowered—Produces double white fragrant flowers in clusters.

Chinese Double Rose-Flowered—Has beautiful double, rose-colored, fragrant flowers nearly two inches in diameter in May. The best of all the crabs for ornamental planting; should be in every collection.



BECHTEL'S CRAB.

CRAB—Fragrant Garland-Flowered—Single blush flowers, with the fragrance of sweet violets; blossoms appear about a week after those of the Double Rose-Flowered; very desirable. May.

Floribunda atrosanguinea—Single flower; beautiful carmine. A charming variety. May.

CYPRESS—Deciduous or Southern—A beautiful, stately tree, with small, feathery, light green foliage.

DOGWOOD—White=Flowered—An American species, of spreading, irregular form, growing from sixteen to twenty-five feet high. The flowers produced in spring before the leaves appear are from three to three and one-half inches in diameter, white and very showy. They begin to appear just as the Magnolia flowers are fading, and are invaluable for maintaining a succession of bloom in the garden border or on the lawn.

They also are very durable, lasting in favorable weather more than two weeks. Besides being a tree of fine form, its foliage is of a grayish green color, glossy and handsome, and in the autumn turns to a deep red, rendering the tree one of the most showy and beautiful objects at that season. We regard it, all things considered, as one of the most valuable trees for ornamental planting, ranking next to the Magnolia among flowering trees, and only second to the Scarlet Oak (which it almost equals) in brilliant foliage in autumn.

Red=Flowered—Recently introduced. A variety producing flowers suffused with bright red; blooms when quite young.

ELM—American White or Weeping—The noble spreading and drooping tree of our own forests, peculiarly adapted for street and park planting.

Belgica—A choice variety of the English, of large size, rapid growth, and fine spreading shape. Valuable for street planting.

Dovæi—A very fine European variety, of rapid growth, and with handsome foliage, valuable for any purpose. Specially adapted for street planting.

English—An erect, lofty tree, of rapid, compact growth, with smaller and more regularly cut leaves than those of the American, and darker colored bark.

Huntingdon—Of very erect habit, and rapid, vigorous growth. Bark clean and smooth. One of the finest Elms for any purpose.

Purple=leaved, English—A striking variety, with erect branches and purple leaves.

Scotch--A fine spreading tree, of rapid growth and large foliage.

Superba (Blandford Elm)—A noble tree of large size and quick growth; foliage large and dark green, bark smooth and grayish. A superb shade tree, and highly ornamental.

Variegated English—Small leaves, sprinkled over with silvery spots; variegation constant.

HORSE CHESTNUT—White-Flowered—This well-known species forms a large-sized tree, of handsome, regular outline, is very hardy, and free from all diseases. In May it is covered with magnificent erect spikes or panicles of white flowers lightly marked with red. As a single lawn tree, or for the street, it has no superior.

Double White=Flowered—A superb variety, with double flowers, in larger panicles than the common sort, and of fine pyramidal habit. The absence of fruit by which much litter is avoided, is an important argument in favor of its employment. It is one of the best ornamental trees.

- HORSE CHESTNUT—Ohio Buckeye—A native of the Western States, forming a large-sized tree; leaves smooth; flowers yellow; blooms before the others.
 - Red-Flowered—One of the finest trees in cultivation; form round, flowers showy red: blooms a little later than the white, and the leaves are of a deeper green. One of the most valuable ornamental trees. The White-Flowered and this contrast well when planted together.
- JUDAS TREE OR RED BUD—American—A very ornamental, native tree, of medium size, irregular rounded form, with perfect heart-shaped leaves of a pure green color, glossy surface above, and grayish green beneath. The tree derives the name of Red Bud from the profusion of delicate reddish purple flowers with which it is covered before the foliage appears. Flowering at the same time with the Chinese Magnolias, it may be planted among them in groups with fine effect. Grown as single specimens they are also beautiful and attractive, and deserve to be classed among our finest ornamental trees.
 - **Japan**—Of medium size, rounded form, foliage deep shining green, and heart-shaped; flowers larger than those of the *American*, and of a rich reddish purple color; a valuable addition to the list of choice small trees.
- KENTUCKY COFFEE TREE—A fine native tree, of secondary size, rapid, upright growth, with rough bark, stiff, blunt shoots, and feathery foliage, of a bluish green color.
- KŒLREUTERIA—Paniculata—From China. A hardy, small, round headed tree, with fine lobed leaves and large panicles of showy golden yellow flowers, in the latter end of July; leaves change in autumn to a fine yellow. One of the most desirable trees, particularly valuable for its brilliant, golden blossoms, which are produced so late in the season, when few if any trees are in bloom.
- **LABURNUM—Common Laburnum or Golden Chain—**A native of Europe, with smooth and shining foliage. The name "Golden Chain" alludes to the length of the drooping racemes of yellow flowers, which appear in June.
 - Alpine or Scotch—A native of the Alps of Jura. Also said to be found wild in Scotland. Of irregular, picturesque shape, smooth, shining foliage, which is larger than the English, and yellow flowers in long racemes. Blooms later than the English.
- **LARCH—European**—An elegant, rapid growing, pyramidal tree; valuable for shelter and timber.
- LINDEN—American (Basswood)—A rapid growing, large-sized, beautiful native tree, with very large leaves and fragrant flowers.
 - Dasystyla—A vigorous tree, with cordate, dark green, glossy leaves, and bright yellow bark in winter. A superb tree.
 - **European**—A very fine pyramidal tree of large size, with large leaves and fragrant flowers.
 - Red Fern-Leaved—An elegant tree, of pyramidal compact habit. Bark on young wood rose-colored, and foliage deeply cut. One of the finest trees for the lawn.
 - White-Leaved European—A vigorous growing tree of medium size and pyramidal form. It is particularly noticeable among trees by its white appearance. Its handsome form, growth, and foliage, render it worthy of being classed among the finest of ornamental trees.
- MAGNOLIA—Acuminata—(Cucumber Magnolia)—A beautiful pyramidal growing tree, attaining from sixty to ninety feet in height. Leaves six to nine inches long, and bluish green; flowers yellow, tinted with bluish purple: fruit, when green, resembling a cucumber; hence the name. June.
 - Soulangeana—Shrubby and branching while young, but becoming a fair-sized tree. Flowers white and purple, cup-shaped, and three to five inches in diameter. Foliage large, glossy, and massive. One of the hardiest and finest of the foreign Magnolias.
 - Tripetela (Umbrella Tree)—A hardy, medium-sized tree, with immense leaves and large white flowers four to six inches in diameter, appearing in June.
- MAIDEN HAIR TREE—(Salisburia)—A remarkable tree from Japan, combining in its habit characteristics of the conifer and deciduous tree. The tree is of medium size, rapid growth, with beautiful, fern-like foliage. Rare and elegant.

MAPLE—Ash-Leaved (Box Elder)—A native tree, maple-like in its seeds and ashlike in foliage; of irregular spreading habit and rapid growth.

European Sycamore—A handsome tree, of rapid, upright growth, with large foliage, and smooth, ash gray colored bark.

Japan Cut=Leaved Purple—One of the most striking and handsome varieties of the Japanese Maples. Form dwarf and weeping. The leaves are of a beautiful rose color when young, and change to a deep and constant purple, as they become older. They are also deeply and delicately cut, giving them an elegant, fern-like appearance. The young growth is long, slender and pendulous and like the leaves, has a deep, crimson hue. Besides being an elegant and attractive lawn tree, it is also very useful for conservatory decoration in spring.



DARK PURPLE-LEAVED JAPAN MAPLE.

MAPLE—Japan Dark Purple=Leaved—Of dwarf habit and rounded form; foliage five-lobed and serrated; reddish crimson in June, changing to dark purple, which it retains all summer. A charming variety, and one of the best of the Japanese Maples. (See cut above.)

Manitoba-Same as Ash-Leaved Maple.

Negundo—Same as Ash-Leaved Maple.

Norway—A large handsome tree, of spreading rounded form, with broad, deep green, shining foliage. Its compact habit, and stout, vigorous growth, render it one of the most desirable species for the street, park or garden. The young trees are not as smooth and straight as those of the Silver and Sugar varieties.

MAPLE—Purple-Leaved Sycamore—Tree of fine robust habit. Foliage deep green on the upper surface, and purplish red underneath. Produces a fine effect planted with golden leaved trees.

Red or Scarlet—A native species of medium size and rounded head; produces deep red blossoms which appear before the leaves. In autumn the foliage

changes to a brill-

Reitenbach's Norway — An excellent and striking variety, with handsome foliage —green in spring, changing to purple as the season advances.

Schwedler's Nor= way-A beautiful variety, with the young shoots and leaves of a bright purplish and crimson color, which changestopurplish green in the older leaves. One of the most valuable trees of recent introduction. Specially adapted for lawn planting. Straight, smooth growing specimens of this variety can seldom be furnished.



SCHWEDLER'S NORWAY MAPLE.

Silver-Leaved or Soft—A well-known native tree of rapid growth, large size, and irregular rounded form; foliage bright green above and silvery white beneath; tree very hardy and easily transplanted. One of the most useful trees for street and lawn planting.

Sugar, or Hard—A well-known native tree, of elegant pyramidal form; valuable both for the production of sugar and for its wood; its stately growth, fine form and foliage make it desirable as an ornamental and shade tree.

Tri-Color Leaved Sycamore—A variety of the European Sycamore, having its leaves distinctly marked with white, red, and green, and retaining their variegation all summer.

Wier's Cut-Leaved Silver—This is one of the most remarkable and beautiful trees with cut or dissected foliage yet offered. Its growth is rapid, shoots slender and drooping, giving it a habit almost as graceful as the Cut-Leaved Birch. The foliage is abundant, silvery underneath, and on the young wood especially, deeply and delicately cut.

Worle's Golden-Leaved Sycamore—In the spring the foliage is of a golden yellow color, which changes to a duller shade as the season advances. The young growth continues brilliant throughout the summer. A valuable and effective variety for grouping with purple-leaved trees.

MOUNTAIN ASH—European—A fine, hardy tree, head dense and regular: covered from July till winter with great clusters of bright scarlet berries.

Oak-Leaved—A hardy tree of fine pyramidal habit. Height and breadth from 20 to 30 feet. Foliage simple and deeply lobed, bright green above and downy beneath. One of the finest lawn trees.

OAK—American Red—An American species, of large size and rapid growth; foliage purplish red in the fall.



WIER'S CUT-LEAVED SILVER MAPLE.

OAK — American White

—One of the finest

American trees, of large size and spreading branches.

Cut-Leaved — A tree of fine habit and elegant deeply cut foliage. One of the best cut-leaved trees.

English—The Royal Oak of England; a well-known tree of spreading, slow growth.

Golden—A superb variety, with orange yellow leaves, which retain their golden tint throughout the season; one of the finest golden-leaved trees.

Mossy Cup, or Burr Oak—A native tree, of spreading form. Foliage deeply lobed, and the largest and most beautiful among Oak leaves. Cup bearing, acorn fringed and burr-like. Bark corky. One of the noblest of the family.

OAK—Pin—Foliage deep green, finely divided; assumes a drooping form when it acquires age. A valuable tree.

acquires age. A valuable tree.

Purple-Leaved—A magnificent variety,
with dark purple leaves which retain
their beautiful tint the entire summer.

Scarlet—A native tree of rapid growth, pyramidal outline, and especially remarkable in autumn, when the foliage changes to a bright scarlet.

Turkey — A very handsome South European species, of rapid, symmetrical growth; foliage finely lobed and deeply cut; leaves change to brown in autumn, and persist during a great part of the winter. Fine for the lawn.

PAULOWNIA—Imperialis—A magnificent tropical looking tree from Japan; of extremely rapid growth, and surpassing all others in the size of its leaves, which are twelve to fourteen inches in diameter. Blossoms trumpet-shaped, formed in large upright panicles, and appearing in May. Quite hardy here, but the flower buds are killed during severe winters.

PEACH—Double White-Flowered—Very ornamental. Flowers pure white and double; superb. Perfectly hardy. May.



EUROPEAN SYCAMORE MAPLE.

PEACH—Double Rose=Flowered—Flowers double, pale rose-colored, like small roses; very pretty. May.

Double Red=Flowered-Flowers semi-double, bright red. Superb. May.

Purple or Blood-Leaved—Foliage of a deep blood-red color in spring, fading to a dull green as the season advances, but the young growth preserves its dark color the entire summer. Very valuable on account of its rapid growth and handsome foliage. The tree should be severely cut back every spring.

The double flowered Peaches are distinguished for their showy and beautiful bloom. At the blossoming season every branchlet is covered with a mass of beautifully formed, highly-colored flowers, rendering the trees most interesting objects and attracting notice from a distance. The double red, double rose and double white varieties planted in a group produce a charming effect. We cannot too highly recommend these superb flowering trees, which are now sadly neglected.

PLANE—American (Sycamore or Buttonwood)—A well known tree. Leaves heart-shaped at base, the short lobes sharp-pointed.

Oriental—Similar to the above, but leaves more deeply cut.

POPLAR—Balsam—A native species of remarkably rapid, luxuriant growth, with large glossy foliage.



AN AVENUE PLANTED WITH CAROLINA POPLARS.

POPLAR—Carolina—A remarkably rapid, luxuriant grower; leaves large, glossy, pale to deep green. Valuable as a street or shade tree when shade is desired quickly. It will also be found useful for planting as a screen to hide unsightly buildings, etc.

Cottonwood or Canadian—A tall native tree growing 80 feet high, with broadly deltoid, glabrous shining serrate leaves.

Lombardy—Attains a height of from 100 to 150 feet. Well known and remarkable for its erect, rapid growth, and tall, spiry form. Indispensable in land-scape gardening, to break the ordinary and monotonous outlines of most other trees.

Van Geert's Golden—Has fine golden yellow foliage, retaining its brilliancy throughout the season; effective in masses.

POPLAR—White or Silver (Silver Abele)—A tree of wonderfully rapid growth and wide-spreading habit; leaves large, lobed, glossy green above and white as snow beneath. Prefers a moist soil, but flourishes anywhere.

SWEET GUM—Liquidambar—One of the finest American trees. Of medium size and moderate growth; form round-headed, or tapering; leaves resemble somewhat those of the Maple, but are star-shaped, and of a beautiful glossy green color in summer, turning to a deep purplish crimson in autumn; bark corky. Beautiful in all stages of growth, it is particularly handsome and striking in autumn.

THORN-Double-Scarlet-A charming variety; flowers deep crimson, with scarlet

shade, and very double.

Double-White—Has small double-white flowers.

Double-Red—Bright double-red flowers.

Paul's Double-Scarlet—Flowers bright carmine red. Superior to any of its color.

The Thorns justly deserve to be classed among the most beautiful flowering trees. They are generally dense, low growers, occupying comparatively little space and well adapted to beautify small grounds. If judiciously pruned, they can also be trained to assume picturesque tree forms. The foliage is varied and attractive, flowers very showy and often highly perfumed. The fruit is ornamental. There are numerous varieties, all of which are hardy and will thrive in any dry soil. We have endeavored to select the best and most distinct. They flower in May and June.

TULIP TREE—A magnificent native tree, of tall, pyramidal habit, with broad, glossy, fiddle-shaped leaves of a light green color, and beautiful tulip-like flowers; allied to the Magnolias, and, like them, difficult to transplant, unless of small size. (See cut, below.)

Variegated-Leaved-One of the finest variegated trees; the margins on the broad, glossy leaves are variegated with a very light green, giving the tree a

striking appearance.

WALNUT—Butternut—A native tree, of medium size, spreading head, grayish-

colored bark. Nut oblong and rough.

Black Walnut - Another native species, of great size, and majestic habit. Bark very dark and deeply furrowed. Foliage beautiful, each leaf being composed of from thirteen to seventeen leaflets. Nut round.

European or Madeira Nut—(English Walnut)—A native of Persia. Loftier

and larger in its native country than our Butternut is with us. Nut oval and very fine.

Dwarf English or European Walnut—A dwarf variety that bears when quite small.



TULIP TREE. (A Young Specimen.)

WILLOW-Britzensis-Very attractive in winter, when the bark turns red.

Laurel-Leaved—A fine ornamental tree, with large, glossy leaves.

Rosemary Leaved—One of the prettiest round-headed small trees; branches feathery; foliage silvery. Deserving of more attention than it has hitherto received.

Royal - An elegant tree, with rich, silvery foliage. Very effective in groups.

Russian Golden—A rare and valuable variety, particularly attractive in winter on account of its bright golden bark.

Siebold's—A tree of elegant habit, with long, graceful branches, and narrow, deep green leaves.

YELLOW WOOD-Virgilia lutea-One of the finest American trees. Of moderate growth, broadly rounded head; foliage light green, turning to a warm yellow in autumn; flowers pea-shaped, white, sweet-scented, appearing in June in great profusion, in long, drooping racemes covering the tree.

SELECT PENDULOUS OR

WEEPING DECIDUOUS TREES.

ASH—European Weeping—The common, well known sort; one of the finest lawn and arbor trees; covers a great space, and grows rapidly.

BEECH — Weeping — A remarkably vigorous, picturesque tree, of large size. Its mode of growth is extremely curious. The trunk or stem is generally straight with the branches tortuous and spreading; quite ungainly in appearance divested of their leaves, but when covered with rich, luxuriant foliage of wonderful grace and beauty.

BIRCH — Cut = Leaved Weeping —
Beyond question one of the most popular of all weeping or pendulous trees. Its tall, slender, yet vigorous growth, graceful, drooping branches, silvery-white bark, and delicately cut foliage, present a combination of attractive characteristics rarely met with in a single tree.

European White—A graceful tree of moderate size, with silvery bark and slender branches. After four or five years' growth the trees assume an elegant drooping habit.



CUT-LEAVED WEEPING BIRCH.

CHERRY—Japan Weeping—Feathery and graceful; flowers single white; fruit red. One of the finest of the small-headed pendent cherries.

Japan Weeping Rose-Flowered—One of the finest pendulous trees for lawns or small grounds. The branches are slender, and fall gracefully to the ground, and the flowers are rose-colored, appearing before the leaves. Undoubtedly one of the finest weeping trees. (See cut, page 36).

Among trees of drooping habit there is none more beautiful than the one represented by the illustration (next page). The beauty of the tree consists not only in its graceful pendulous habit, but it has besides the merit of producing quantities of flowers in the blossoming season, and the branches when covered with these give the tree a novel, interesting and charming effect, as will be seen from the picture. The foliage of the tree, too, is handsome. This tree is well suited for either large or small places, and should be planted by itself, where it can have room to develop. By cutting it can be confined to a small space, and if permitted to grow it will cover considerable ground in the course of time. No drooping tree of recent introduction has more merits than this.

ELM—Camperdown—Grafted 6 to 8 feet high, this forms one of the most picturesque drooping trees. It is of rank growth, the shoots often making a zigzag growth outward and downward of several feet in a single season. The leaves are large, dark green and glossy, and cover the tree with a luxuriant mass of verdure.

- MOUNTAIN ASH—Weeping—A beautiful pendulous French variety; fine for arbors,
- MULBERRY—(Teas') Weeping Russian—Forms a perfect umbrella-shaped head, with long, slender branches drooping to the ground, parallel to the stem; very hardy. A new weeper, destined to become very popular when better known.
- WILLOW—American Weeping—Grafted 5 or 6 feet high, it makes one of the most ornamental of small weeping trees. Hardier than Babylonian.



JAPAN WEEPING ROSE-FLOWERED CHERRY.

WILLOW-Babylonian-The common well-known weeping willow.

Kilmarnock Weeping—Forms a perfect umbrella-head; unique in form, and exceedingly graceful.

Wisconsin Weeping—Of drooping habit and hardier than Babylonian. Valuable on account of its ability to resist severe cold.



WEEPING RUSSIAN MULBERRY.

SELECT EVERGREEN TREES.

We recommend planting Evergreens in the spring only.

ARBOR VITÆ—American—A fine, erect tree with horizontal branches and flat foliage. Excellent for screens and hedges. Commonly known as White Cedar.

Compact—A variety of the preceding, of dwarf, compact form.

Globe=Headed—Forms a dense, round shrub. Very desirable.

Hovey's Golden—A seedling from the American; of dwarf habit, globular outline, and bright green foliage. Fine and hardy.

Pyramidal—Of upright, compact habit, like the Irish Juniper; very desirable.

Siberian—Exceedingly hardy, keeping color well in winter; growth compact and pyramidal; makes an elegant lawn tree. Of great value for ornaments, screens and hedges.

Tom Thumb—A dwarf variety of the American Arbor Vitæ, remarkable for its slow growth and compact, symmetrical habit. Valuable for the decoration of gardens, lawns or cemeteries, where large trees may not be admissible. Will be found useful for small evergreen hedges.

JUNIPER—Irish—A distinct and beautiful variety, forming a column of deep green foliage.

Irish Robust—More vigorous than the preceding and no doubt hardier, but not quite so regular in form, nevertheless handsome.

Red Cedar—A well known American tree; varies much in habit and color of foliage, some being quite stiff, regular, and conical, and others loose and irregular. It makes a fine ornamental hedge plant.

Swedish—A small-sized, handsome pyramidal tree, with bluish green foliage.

Venusta—A rapid grower, of erect habit and fine silvery foliage; very ornamental and perfectly hardy.

PINE—Austrian or Black—Tree remarkably robust, hardy and spreading; leaves long, stiff and dark green; growth rapid. The most valuable for this country.

Cembra (Swiss Stone Pine)—A handsome and distinct European species, of compact conical form; foliage short and silvery; grows slowly when young.

Dwarf Mugho—An upright, small pine; found on the Pyrenees and Alps. Its general form is that of a pine bush, but it has been found growing as high as forty feet.

Scotch—A native of the British Isles. A fine, robust, rapid-growing tree, with stout, erect shoots, and silvery green foliage. Very hardy; valuable for shelter.

White—The most ornamental of all our native pines; foliage light, delicate, or silvery green. Flourishes in the poorest light sandy soil. Very valuable.

SILVER FIR—Balsam—A very erect, regular, pyramidal tree, with dark green somber foliage. Grows rapidly and is very hardy.

Concolor—(Silver Fir of Colorado)—Without doubt the finest of the Rocky Mountain evergreens. Tree of graceful habit; broad, handsome foliage, bluish above, silvery beneath. A grand tree, very distinct and exceedingly rare as yet.

Nordmann's—A noble fir of majestic and symmetrical form, found on the Crimean Mountains. Hardy; one of the best evergreens.

SPRUCE—**Colorado Blue** (**Pungens**)—One of the hardiest and most beautiful of all the spruces; in form and habit similar to the White Spruce; foliage of a rich blue or sage color; an important acquisition.

Conical—A dwarf variety, of compact, conical habit; becomes perfectly symmetrical without pruning. *One of the best*.

Douglas'—From Colorado. Large, conical form; branches spreading, horizontal; leaves light green above, glaucous below.

Hemlock—A remarkably graceful and beautiful native tree, with drooping branches, and delicate, dark foliage, like that of the Yew; distinct from all other trees. It is a handsome lawn tree, and makes a highly ornamental hedge.

SPRUCE—Norway—An elegant tree, extremely hardy, of lofty, rapid growth, and pyramidal form. The branches assume a graceful, drooping habit, when the tree attains 15 to 20 feet in height. One of the most popular evergreens for planting, either as single specimen trees, or in masses for effect or shelter. It is one of the best evergreen hedge plants.

White—A native tree of medium size, varying in height from 25 to 50 feet, of pyramidal form. Foliage silvery gray, and bark light colored. Very hardy

and valuable.

YEW—Elegantissima—One of the most valuable golden-leaved evergreens which we have. In June and July the leaves of the new growth are of a bright straw color, rendering the plant highly effective, either by itself or in connection with other conifers. One of the hardiest of the Yews.

English—A large bush or tree, 30 to 40 feet when fully grown. It is densely branched and can be trimmed into any shape.

Erect—An erect-growing variety, with small dark, shining leaves. One of the hardiest of the Yews.

Washington's Golden Yew—Foliage handsomely variegated with yellow spots and stripes.

LILIES.

These require a good mellow soil. In the open ground they should be planted five inches deep, in as warm a situation as possible. Nothing can exceed the beauty of this well known flower. The following are choice sorts which will improve from year to year. They should be planted in clumps of six to eight, and thus become very effective. They can also be planted in Spring.

ATROSANGUINEUM—Orange red.

AURATUM-Golden-rayed Queen of Lilies-Magnificent Japan Lily.

CANDIDUM-The Madonna Lily-The well-known white garden Lily.

HARRISII—Bermuda Easter Lily—Flowers large, trumpet-shaped; in general appearance resembling L. longiflorum and possessing a delightful fragrance. It is a remarkably free bloomer, and is valuable either for forcing or for outdoor planting.

JAPONICUM LONGIFLORUM — Easter Lily — Trumpet-shaped, snow-white, fragrant.

LANCIFOLIUM RUBRUM—Rose, spotted with crimson.

LANCIFOLIUM ALBUM-White spotted, fragrant.

SUPERBUM—Our native lily, and one of the finest of them all.

TIGRINUM-Tiger Lily-Orange salmon.

TIGRINUM FLORE PLENO-Double Tiger Lilv.

HARDY ORNAMENTAL FLOWERING SHRUBS.



DEUTZIA GRACILIS.

ALMOND—Dwarf Double White=Flowered—Produces beautiful double white flowers in May.

Dwarf Double Red-Flowered—A beautiful small shrub, bearing an abundance of small double rose-like flowers, in May, closely set upon twigs before the leaves appear.

ALTHÆA—(Rose of Sharon or Hibiscus) Double=Red—Clear color; one of the best.

Double=Purple.

Double Variegated, or Painted Lady—White, with purple outside. Petals shaded pink.

Double=White.

Single=White.

Variegated-Leaved—A conspicuous variety, with the foliage finely marked with light yellow, and producing double purple flowers. One of the finest variegated-leaved shrubs.

The Altheas are fine, free-growing flowering shrubs, of the easiest cultivation. Very desirable on account of blooming in autumn months, when scarcely any other tree or shrub is in blossom. August and September.

ARALIA—Pentaphylla—A pretty Japanese shrub, of medium size and rapid growth; branches furnished with spines; leaves palmate, five-lobed, and pale green. September.

AZALEA—Mollis—A splendid hardy species from Japan, and one of the most valuable flowering shrubs. Flowers large and showy, like those of the Rhododendron, in fine trusses and of various colors. For spring delivery only.

BARBERRY—American—A native species, with handsome, distinct foliage and yellow flowers from April to June, succeeded by red berries.

European—A handsome shrub with yellow flowers in terminal drooping racemes in May or June, followed with orange scarlet fruit.

BARBERRY - Purple=Leaved -

An interesting shrub, growing 3 to 5 feet high, with violet purple foliage and fruit; blossoms and fruit beautiful; very effective in groups and masses, or planted by itself.

Thunbergii—(Thunberg's Barberry)—From Japan. A pretty species, of dwarf habit, small foliage, changing to a beautiful red in autumn, making it very attractive.

CALYCANTHUS—(Sweet= Scented Shrub)—Floridus —A native species, with double purple, very fragrant flowers.

CLETHRA—Sweet Pepper Bush
—Spikes of clear white,
fragrant flowers in August.
Dwarf habit.

COLUTEA — Bladder Senna — A large shrub, with small, delicate foliage and yellow, pea-blossom shaped flowers, followed by reddish pods or bladders.



TREE HYDRANGEA.

CORNUS, OR DOGWOOD—Mascula (Cornelian Cherry)—A small tree, producing clusters of bright yellow flowers, early in spring before the leaves.

Mascula Var.—(Variegated Cornelian Cherry)—Foliage beautifully variegated with white; one of the prettiest variegated shrubs in cultivation.

Red-Branched—(**Sanguinea**)—A native species, very conspicuous and ornamental in winter, when the bark is blood red.

Spæth's Golden Variegated—A charming variety, with golden variegated foliage.

Variegated-Leaved Red-Branched—(Elegantissima Var.)—This variety of the well known red Dogwood has silver-margined leaves, which render it a very showy shrub. We consider it to be an addition of great merit.

CURRANT—Gordon's—A hardy and profuse blooming shrub. Flowers crimson and yellow in pendent bunches in May,

Yellow=Flowered—A native species, with shining leaves and vellow flowers.

Crimson-Flowered—An American species, with deep red flowers, produced in great abundance in early spring.

DEUTZIA—Double-Flowered (crenata fl. pl.)—Flowers double; white tinged with rose. One of the finest flowering shrubs in cultivation.

Double White (alba pl.)—Similar to the preceding, but has pure white double flowers.

Gracilis—(slender-branched)—A charming species; flowers pure white. Fine for pot culture and cemetery planting. Of dwarf habit. (See cut, page 40.)

Pride of Rochester—A variety raised from the double-flowered and producing large, double white flowers, the back of the petals being slightly tinged with rose. It excels all of the older sorts in size of flower, length of panicle, profuseness of bloom and vigorous habit, and blooms nearly a week earlier than the parent.

Scabra—(rough-leaved)—One of the most beautiful profuse flowering shrubs; flowers single white.



HYDRANGEA PANICULATA GRANDIFLORA.

ELÆAGNUS LONGIPES—This is a remarkably beautiful new shrub from Japan. In July the plant is covered with bright red berries of large size and edible, the flavor being pungent and agreeable. Laden with fruit the bush is highly ornamental, and the fact that its leaves remain fresh till late in the autumn gives it additional value for garden decoration.

ELDER—Black-Berried—A native of Europe, of medium size, with purplish black berries in September.

Cut-Leaved—A valuable variety with elegantly divided leaves; one of the best cut-leaved shrubs.

Fern=Leaved—Luxuriant grower, with deeply and delicately cut foliage.

Golden—A handsome, vigorous, rapid growing variety, with golden yellow foliage, the brilliancy of which is retained throughout the season. A valuable plant for enlivening shrubberies.

Variegated=Leaved—Of strong healthy growth; foliage mottled with yellow and white. One of the best variegated-leaved shrubs.

EUONYMUS-European Red=Fruited Strawberry Tree-Forms a tree sometimes 30 feet in height. Fruit rose colored.

White=Fruited Strawberry Tree-A variety with white fruit.

EXOCHORDA GRAND=

IFLORA - A rare shrub, producing in remarkable profusion large, white flowers in May.
One of the finest shrubs of its season. Difficult to propagate and always scarce.

FILBERT-Purple= Leaved - A very conspicuous shrub, with large, dark purple leaves. Distinct and fine.

> Cut=Leaved--A very ornamental shrub. with deeply cut foliage.

FORSYTHIA - Viridis= sima—Leaves and bark deep green, flowers deep yellow; one of the earliest flowering shrubs; very conspicuous.

> Fortune's - Growth upright; foliage deep green, flowers bright yellow.

> Intermedia--A valuable new variety: bright



TRUSS OF HYDRANGEA, P. G.

golden; foliage glossy green like viridissima, but hardier than that variety. HONEYSUCKLE, UPRIGHT—Fragrantissima—A spreading shrub with deep green foliage and very fragrant small flowers, which appear before the leaves; foliage almost evergreen; most desirable.

Pink=Flowered (Grandiflora)—A beautiful shrub, very vigorous, and producing

large, bright red flowers, striped with white, in June.

Red Tartarian—Pink flowers, which contrast beautifully with the foliage. June. White Tartarian—Forms a high bush, with creamy-white, fragrant flowers. May and June.

HOP TREE--A large shrub or small tree, of rapid growth and robust habit. Fruit

winged and in clusters. June.

HYDRANGEA-Paniculata Grandiflora-A fine shrub, perfectly hardy, growing from eight to ten feet high, flowers in August and September, white, in great pyramidal panicles a foot long. Decidedly one of the finest flowering shrubs. (See cuts, pages 42 and 43).

Tree Form—(See cut, page 41).

JAPAN QUINCE—See Quince.

KERRIA-Japan Corchorus-A slender, green-branched shrub, 5 or 6 feet high, with globular, yellow flowers from July to October.

Double-Flowered Corchorus-Of medium size; double yellow flowers.

LILAC-Well-known, beautiful shrubs, indispensable in every collection. They flower in May.

LILAC—Cœrulea Superba—Flowers light purple in bud, but when fully open a clear blue; trusses very large. One of the best.

Common Purple—Bluish purple flowers.

Common White--Cream-colored flowers.

Dwarf—Distinct, large, and compact spike of dark reddish purple, fragrant flowers.

Josikæa—A fine, distinct species, of tree-like growth, with dark, shining leaves and purple flowers in June, after the other Lilacs have done flowering. Esteemed particularly for its fine habit and foliage.

Persian-Small foliage and bright purple flowers; grows from 4 to 6 feet high.

Princess Alexandra—A variety with pure white flowers; panicles medium to large; one of the finest white.

Prince of Wales—Panicles medium to large, flowers purplish lilac, the petals slightly curling near the edge, giving the flowers the appearance of being striped.

Rouen (Rothomagensis)—A distinct hybrid variety, with reddish flowers; panicles of great size, and very abundant. One of the finest.

Siberian White—A vigorous grower, foliage small and narrow, flowers white with a bluish tint, fragrant and handsome.

NEW LILACS.

Double-flowered and single-flowered, the latest introductions. We have taken great pains to secure the choicest, and can now offer fine plants. We advise every one of our patrons to secure these acquisitions, the most remarkable and valuable additions to the list of hardy flowering shrubs made in many years.

- **Frau Dammann**—Pure white; very large panicle; one of the finest white lilacs. Single.
- Japan Tree Lilac—(Japonica)—A new species from Japan, becoming a goodsized tree. Foliage dark green, glossy, leathery; flowers single, creamy white, odorless, in great panicles. A month later than other lilacs.
- **Lamarck**—Very large panicle; individual flowers large, very double, rosy lilac; superb when open.
- **Ludwig Spæth**—Very dark purplish red, distinct, large panicle; single; the finest of its color.
- **President Grevy**—A beautiful blue, individual flowers very double and very large, the panicle is magnificent, one of the finest lilacs. (See cut, page 45.)
- Villosa—Another new species from Japan. Large branching panicles; flowers single, light purple in bud, white when open; fragrant; foliage resembles that of the *White Fringe*. Especially valuable, as its flowers appear two weeks after those of other Lilacs. (See cut, page 46).
- PLUM—Purple=Leaved (Prunus Pissardi)—The finest purple-leaved small tree or shrub of recent introduction. The young branches are a very dark purple; the leaves when young are lustrous crimson, changing to a dark purple, and retain this beautiful tint till they drop late in autumn; no other purple-leaved tree or shrub retains its color like this. It transplants easily and is worthy of wide dissemination. Flowers small, white, single, covering the tree.
 - **Double-Flowered** (**Prunus Triloba**)—Native of China. A highly interesting and desirable addition to hardy shrubs; flowers double, of a delicate pink, upwards of an inch in diameter, thickly set on the long, slender branches; flowers in May. (See cut, page 47).
- PRIVET—California—A vigorous, hardy shrub, of fine habit and foliage; valuable for hedges. (See cut, page 53.)



NEW LILAC--PRESIDENT GREVY. (Reduced.)

PRIVET—Ibota—A valuable new shrub, native of China and Japan. Flowers large, white, very fragrant, produced in great profusion; leaves long and shining; one of the hardiest of the Privets and distinct. A charming shrub which will be prized for its fragrant flowers, as well as for its handsome foliage.

PURPLE FRINGE OR SMOKE TREE—A much admired shrub for its curious fringe, or hair-like flowers, that cover the whole surface of the plant in the latter end of July. It grows ten or twelve feet high, and spreads so as to require considerable space.

QUINCE—The flowering varieties of the Japan Quince rank among our choicest shrubs. Although of straggling growth, they bear the knife well, and with proper pruning may be grown in any form. As single shrubs on the lawn they are very attractive. Their large brilliant flowers are among the first blossoms in spring and they appear in great profusion, covering every



LILAC VILLOSA.

branch, branchlet, and twig, before the leaves are developed. Their foliage is bright green and glossy, and retains its color the entire summer, which renders the plant very ornamental. Special attention is invited to this plant for ornamental hedges. It is sufficiently thorny to form a defence, and at the same time makes one of the most beautiful flowering shrubs. See Hedge plants.

Blush—A very beautiful variety of the scarlet, with delicate white and blush flowers

Scarlet — Has bright scarlet crimson flowers.

Umbelicata—Flowers brilliant rosy red,

succeeded by large, showy fruit; forms a large shrub. One of the finest.

RHODOTYPUS—Kerrioides—From Japan. A very ornamental shrub of medium size, with handsome foliage and large, single, white flowers in the latter part of May, succeeded by numerous small fruit.

SPIRÆA—Anthony Waterer—A fine new dwarf Spiræa with dark crimson flowers, darker than Spiræa Bumalda. One of the finest shrubs of recent years.

Billardi-Rose-colored. Blooms nearly all summer.

Bumalda—A very handsome species from Japan. Habit dwarf, but vigorous; foliage narrow, flowers rose-colored, appearing in great profusion during midsummer and autumn.

Callosa—Large panicles of deep rosy blossoms; grows freely and blossoms nearly all the summer.

Callosa Alba—A white flowering variety, of dwarf, bushy, symmetrical form. Keeps in flower all summer.

Double-Flowered Plum-Leaved (Prunifolia fl. pl.)—A beautiful shrub with pure white flowers like daisies in May. Keeps in flower a long time.

SPIRÆA—Golden-Leaved—An interesting variety, with golden yellow tinted foliage and double white flowers in June. Very conspicuous.

Hawthorn-Leaved (Cratægifolia)—A handsome sort. Flowers greenish white in May. Superb.

Lance-Leaved—A charming shrub with narrow, pointed leaves, and large, round clusters of white flowers that cover the whole plant, and render it exceedingly effective. Blooms in June.

Lance-Leaved Double-A beautiful double-flowering variety.

Thunbergii—Of dwarf habit, and rounded, graceful form; branches slender and somewhat drooping, foliage narrow and yellowish green; flowers small, white, appearing early in spring.

Van Houttei—One of the finest flowering shrubs; flowers large, white, appearing in great profusion in early spring. Its ability to endure extremes of cold, together with its beauty of flower and remarkable freedom of bloom, commend it to all planters. (See cut, page 48).

The Spiræas are all elegant, low shrubs of the easiest culture, and their blooming extends over a period of three months.



PRUNUS TRILOBA.

SNOWDROP TREE OR SILVER BELL (Halesia)—A unique and beautiful large shrub, with pretty white bell-shaped flowers in May. It is distinguished by the four-winged fruit, which is from one to two inches long. One of the most desirable shrubs.

SNOWBERRY—A well known shrub, with small pink flowers, and large white berries that hang on the plant through part of the winter.

SUMACH—Cut=Leaved—A very striking plant, of moderate size, with deeply cut leaves resembling fern leaves; dark green above and glaucous below, and turning to a rich red in autumn.

SYMPHORICARPUS—Red-Fruited or Indian Currant—A shrub of very pretty habit. Foliage, flowers, and fruit small; fruit purple; hangs all winter.

SYRINGA, OR MOCK ORANGE—Double-Flowered—A variety with partially double, very fragrant flowers.

Garland—Flowers pure white, highly scented. One of the first to flower.

Golden-Leaved—A very pretty plant of medium size, with golden yellow foliage. It keeps its color the entire season, and will be found valuable for creating pleasing and striking contrasts with purple-leaved shrubs. Very effective in masses.

Gordon's—A vigorous grower and profuse bloomer; flowers slightly fragrant; blooms late, and valuable on that account.

SYRINGA-Hoary=Leaved-A beautiful shrub with large, downy leaves, and large, white flowers; blooms late.

Large=Flowered—Has very showy large flowers, slightly fragrant, branches somewhat straggling.

Laxus-Very large, white, fragrant flowers; upright habit; very free flowering; a valuable sort.

Nivalis—The stamens of this variety are cream-colored, thus rendering the whole flower snowy white. Flowers inodorous.

Speciosus—Very showy flowers; late; distinct habit.

Zehyr's—A large-flowered, odorless variety; flowers very late.

TAMARIX—African—Handsome foliage; upright habit; flowers in May.

Chinese—A vigorous, upright grower, with delicate foliage, of a lively green color: flowers rose-colored in September.

These are very beautiful shrubs, with small leaves, somewhat like those of the Juniper, and delicate small flowers in spikes. They are invaluable for planting by the seaside, where scarcely anything else will grow.



SPIRÆA VAN HOUTTEI.

tana, and terminal cymes of white flowers in May. Very ornamental in foliage and fruit.

Snowball (common)—A well-known favorite shrub of large size, with globular clusters of pure white sterile flowers the latter part of May.

WEIGELA--Candida-A valuable variety. It is of vigorous habit, an erect grower, becoming in time a large-sized shrub; flowers pure white, and produced in great profusion in June, and the plants continue to bloom throughout the summer, and even until autumn.

Desbois—A beautiful variety, with deep, rose-colored flowers, resembling rosea, but flowers much darker. One of the best.

VIBURNUM — Lantana — A

large, robust shrub, with soft, hoary leaves, and large clusters of white flowers in May; retains its foliage very late; quite ornamental in all respects.

High, or Bush Cranber= ry - Both ornamental and useful. Its fruit is esteemed by many; resembles the Snowball in wood and foliage.

Plicatum (Japan Snow= ball) - Of moderate growth; handsome plicated leaves, globular heads of pure white, neutral flowers, early in June. It surpasses the common variety in several respects. Its habit is better, foliage much handsomer, flowers whiter and more delicate. One of the most valuable flowering shrubs.

Rough = Leaved—Has larger and rougher leaves than the LanWEIGELA—Gustave Mallet—Flowers deep red; habit good: very free-flowering.

Hendersonii—Of fine compact habit; rather slender, erect growth; flowers medium size; outside of petals red; interior a lighter shade.

P. Duchartre—Branches erect; flowers clear amaranth color.

Rose-Colored (Rosea)—An elegant shrub, with fine rose-colored flowers, of erect, compact growth; blossoms in June.

Variegated-Leaved Dwarf—Of dwarf habit, with clearly defined silvery variegated leaves which stand the sun well. Flowers nearly white. One of the best dwarf variegated-leaved shrubs in the catalogue.

Another valuable genus from Japan, introduced as late as 1843. Shrubs of erect habit while young, but gradually spreading and drooping as they acquire age. They produce in June and July superb large trumpet-shaped flowers, of all shades and colors, from pure white to red. In borders and groups of trees they are very effective, and for margins the variegated-leaved varieties are admirably suited, their gay-colored foliage contrasting finely with the green of other shrubs. They flower after the Lilacs in June.

WHITE FRINGE—(Chionanthus Virginica)—A small native tree or shrub, of roundish form, with large glossy leaves and drooping racemes of pure white flowers, having narrow, fringe-like petals; blossoms in May or June. A superb lawn shrub.

EVERGREEN SHRUBS.

MAHONIA—Holly=Leaved—A native species of medium size, with purplish, shining, prickly leaves, and showy, bright yellow flowers in May, succeeded by bluish berries. Its handsome, deep green, glossy foliage and neat habit, render it very popular for decorative planting.

RHODODENDRON—Catawbiense Seedlings—Round clusters of lilac and violet flowers; plants with flowering buds, about 18 to 24 inches in height.

Named Varieties—Budded Plants—Fine assortment of colors. Plants with flowering buds, 18 to 24 inches in height. Rhododendrons for Spring delivery only.

TREE BOX-Broad=Leaved-Broad foliage; distinct.

Common—A handsome shrub, with deep green foliage.

Dwarf-For edging.

Handsworth's—An upright, vigorous variety, with oval leaves; very hardy and ornamental; one of the best.

Rosemary=Leaved—Forms a beautiful small bush; foliage glaucous.

The species and varieties of the Tree Box are beautiful lawn shrubs or small trees, well adapted to small places. They flourish best when partially shaded. In this climate they require protection.

CLIMBING AND TRAILING SHRUBS.

A most useful class of plants for this country for covering cottages, verandas, walls, trellises, etc.

ACTINIDIA—A climbing plant from Japan. The flowers are white with a purple center, and sometimes cover the whole vine. The fruit is round, edible and has a fine flavor. Foliage dark green, handsome.

AKEBIA—Quinata—A singular Japanese climbing shrub, with fine foliage, purple flowers and ornamental fruit.

AMPELOPSIS—American Ivy, or Virginian Creeper—Has beautiful digitate leaves, that become rich crimson in autumn. A very rapid grower. Like the Ivy, it throws out roots at the joints, by which it fastens itself to anything it touches.

Veitchii, or Japan Creeper (Boston Ivy)—Leaves smaller than those of the American, and overlap one another, forming a dense sheet of green. The plant is a little tender while young, and requires protection the first winter; but once established, there is no further risk. It grows rapidly and clings to the wall or fence with the tenacity of Ivy; the foliage is very handsome in summer, and changes to crimson scarlet in autumn. For covering walls, stumps of trees, rockeries, etc., no plant is so useful. For the ornamentation of brick and stone structures, it can be specially recommended.

ARISTOLOCHIA—Dutchman's Pipe—A native species, of climbing habit and rapid growth, with magnificent light green foliage 10 to 12 inches in diameter, and curious pipe-shaped, yellowish-brown flowers.

CELASTRUS SCANDENS—A native climbing or twining plant, with fine, large leaves, yellow flowers, and clusters of orange-capsuled fruits. It grows 10 to 12 feet in a season.

CISSUS VARIEGATA—Variegated=Leaved Cissus—A handsome running vine like a grape, with handsomely variegated three-lobed leaves, and small clusters of dark-colored fruit.

CLEMATIS.

None among hardy perennials exceed in beauty and effectiveness the finer sorts of Clematis. As a climber for the veranda, a screen for fences, for pillars along the garden walks, for training on walls or arbors, in masses on rockwork or cultivation in pots, it has no rival among stronggrowing, blossoming plants. The Clematis should be grown in rich, deep, sandy loam, and be well mulched with rotten manure in winter. The richest sheets of bloom and largest flowers are obtained where it has partial shade and a liberal supply of water at the roots. After many years' experience we have come to the conclusion to grow only a few varieties which have proved worthy of general cultivation.

American White—A remarkably rapid climbing plant, growing to the height of twenty feet, producing an immense profusion of small flowers in August.

Henryi-Very large, fine form; free grower and bloomer; creamy white.

European Sweet (Flammula)—Flowers small, white, and very fragrant.

Jackmanni—Large, intense violet purple; remarkable for its velvety richness; free in growth and an abundant and successive bloomer.

Madame Edward Andre—A grand novelty. Flowers large, of a beautiful bright velvety red, very free-flowering, and continuous bloomer.



CLEMATIS PANICULATA.

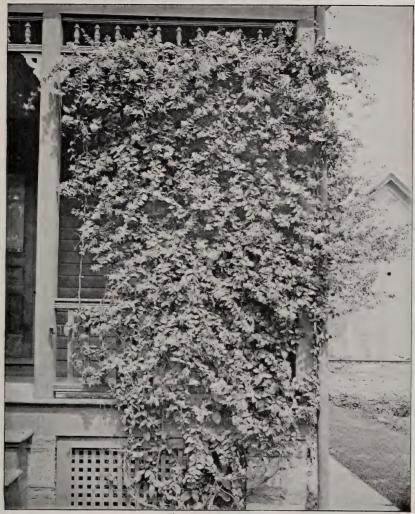
Clematis—Paniculata—A great novelty from Japan. It has proved to be one of the most desirable, useful, and beautiful of hardy garden vines, being a luxuriant grower, profuse bloomer, and possessing fine foliage. It is particularly useful for covering verandas, pillars, fences, where a trellis or support can be provided for it to climb on. The flowers are of medium size, very pretty and fragrant, and produced in the greatest profusion in late summer. We can recommend this novelty in the strongest manner as one of the best vines to grow near the house; it makes a growth of from 25 to 30 feet in a single season, and should be cut back to the ground each spring.

Sieboldi—Large, bright blue flowers; fine.

HONEYSUCKLE — Hall's Japan — A strong, vigorous, almost evergreen sort, with pure white flowers changing to yellow. Very fragrant, and is covered with flowers from July to December; holds its leaves till January. The best of all. (See cut, page 51.)

Japan Golden-Leaved — Foliage beautifully netted or variegated with yellow. A handsome and very desirable variety.

Monthly Fragrant—Blooms all summer. Red and yellow, very fragrant flowers.



HALL'S HONEYSUCKLE.

HONEYSUCKLE—Scarlet Trumpet—A strong, rapid grower, producing scarlet, inodorous flowers all the summer.

PERIPLOCA—**Græca** (Silk Vine)—A rapid-growing, beautiful climber. Will climb around a tree or other support to the height of 30 or 40 feet. Foliage glossy, and purple brown axillary clusters of flowers.

TRUMPET FLOWER—American Climbing—A splendid hardy climbing plant, with large trumpet-shaped scarlet flowers in August.

WISTARIA-Brachybotrys-Flowers light blue and fragrant; clusters short.

Chinese—One of the most elegant and rapid growing of all climbing plants; attains an immense size, growing at the rate of 15 to 20 feet in a season. Has long, pendulous clusters of pale blue flowers in spring and autumn. (See cut, page 52.)

Chinese White—Pure white flowers. Introduced by Mr. Fortune from China and regarded as one of his greatest acquisitions.

Shrubby, or Cluster-Flowered (American)—Resembles the Chinese in general appearance, but the flowers are smaller and paler.

HEDGE PLANTS

WHICH MAY BE EMPLOYED

FOR ORNAMENT, SHELTER, SCREENS AND DEFENSE.

For these purposes we recommend Evergreens like the American and Siherian Arbor Vitee, Norway Spruce, Austrian and Scotch Pines, and many of the Deciduous and Evergreen shrubs, such as the Japan Quince, Deutzias, Spireas, Thunberg's Barberry, California Privet, etc., and for defensive hedges, the Honey Locust and Osage Orange.

FOR ORNAMENT.

The Siberian Arbor Vitee, in our opinion, takes the precedence among Evergreens as an Ornamental Evergreen Hedge Plant. Its thrifty, compact growth, fine form, great hardinood, and deep green color, which its foliage retains throughout the year, adapt it specially for dividing lines between lawns or gardens, or for hedges along streets or avenues.

The American Arbor Vita, though not quite so ornamental in character, being less dense in

growth and spreading in habit, forms a handsome hedge. It may be obtained at less cost than

any other Evergreen hedge plant.
With careful pruning the Norway Spruce may be kept low and in good shape, and grown in

this manner is highly ornamental.

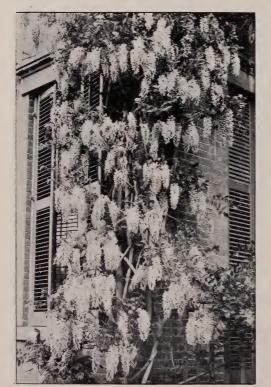
The flowering shrubs are ornamental hedge plants par excellence; among them the Japan Quince, California Privet and Thunberg's Barberry are particularly desirable, on account of their good habit and handsome foliage. We are growing them largely for hedges.

FOR SHELTER AND SCREENS.

For planting in belts to afford shelter from violent winds, or for concealing unsightly objects or views, or for boundary lines, we recommend the *Norway Spruce* and *Austrian* and *Scotch Pines*. Their robust habit, rapid, dense growth, and entire hardiness, are characteristics not easily to be found in other Evergreens.

The American Arbor Viter also is particularly valuable, either for shelter or screens, and for

a deciduous screen the Carolina Poplar cannot be excelled.



WISTARIA CHINESE.

DEFENSIVE HEDGES.

For turning cattle, and as a farm hedge for turning cattle, and as a farm nedge for general purposes, the *Honey Locust*, in this locality and farther north, is the most valuable. It is of vigorous growth, perfectly hardy, and thrives with ordinary care, and is sufficiently thorny to be impenetrable. It bears the shears with impunity, and can be grown in any desired form. South of us, the Osage Orange is in great favor, but it is not hardy enough to be services the here hardy enough to be serviceable here.

DIRECTIONS FOR SETTING.

Evergreens must be handled with care, so as not to allow the roots to become dried by the wind. Plants for hedges being generally set when quite small, should be placed about twelve inches apart; larger sized plants will require more space.

Honey Locust and Osage Orange are generally planted in double rows, about nine

inches apart.

PRUNING.

Evergreens should be pruned in spring just before they commence growing. Summer pruning may be practiced on the *Arbor Vitæ* should the growth be too rapid.

The following varieties and sizes can be supplied:

EVERGREEN.

ARBOR VITÆ—American—Plants 18 to 24 inches high.

Siberian-Plants 18 to 24 ins. high. NORWAY SPRUCE—Plants 18 to 24 inches high.

DECIDUOUS.

HONEY LOCUST-Plants I year old; 2 years old.

OSAGE ORANGE—Plants 1 year old; 2 years old.

JAPAN QUINCE-Plants 18 to 24 inches high.

CALIFORNIA PRIVET-Plants 18 to 24 inches high, and 2 to 3 feet high.

THUNBERG'S BARBERRY-Plants 12 to 18 inches high.

SPIRÆAS—Assorted varieties, our selection.

DEUTZIAS-Assorted varieties, our selection.



CALIFORNIA PRIVET HEDGE.

TREE PÆONIES.

BANKSII—Chinese Double Blush—Flowers of monstrous size; rosy blush with purple center. A magnificent shrub.

HERBACEOUS PÆONIES.

These do best planted in the Fall.

It is surprising that so noble a flower, almost rivaling the Rose in brilliancy of color and perfection of bloom, and the Rhododendron in stately growth, should be so neglected. Amateurs seem to have lost sight of the many improved varieties introduced within the last few years, and our finest gardens, perfect in other respects, are singularly deficient in specimens of the newer kinds. The first point in their favor is hardiness. It may be truly said of them that they are "hardy as an oak." In the severest climate the plants require no other protection than that which they afford themselves. Then, their vigorous habit and healthy growth, freedom from all diseases and insects, are important arguments in favor of their cultivation. Growers of roses know well that their flowers are obtained by great vigilance and care. Not so with the Pacony. Each succeeding year adds to their size and beauty. The foliage is rich and glossy, and of a beautiful deep green color, thus rendering the plants very ornamental even when out of flower. No other flower is so well adapted for large, showy bouquets. The Pacony may be planted either singly on the lawn or in borders. Where the lawn is extensive a large bed makes a grand show, surpassing a bed of Rhododendrons. It is really a flower for the million. (See cut, page 54.)

A large collection of the best varieties of the following colors:

Dark Purplish Crimson, Pink,

Crimson, White,

Red, Rose.



BED OF HERBACEOUS PÆONIES.

SELECT PHLOX.

This, when properly grown, is unquestionably one of the finest autumn flowers—like the Pæony, a flower for the million. It is of vigorous habit, easy culture, and produces in great profusion, during a long season, flowers of fine form and substance, and of bright and varied colors. Just as the roses are fading, the Phlox puts forth her first flowers, producing a fine succession of bloom, and prolonging an interesting season at least six weeks. As regards their culture it may be briefly stated that they succeed in any good garden soil, but they are greatly improved by being liberally manured, and an occasional supply of liquid manure during the growing season will greatly increase the size of their trusses. When in flower they should be watered freely every evening. The Phlox usually flowers in July and August, and in order to render it autumnal flowering it is necessary to pinch the shoots about the first of June and again in July. The plants will then flower in September. For early flowers some of the plants may be left unpinched. When two years old the finest trusses are produced. The third year the plants flower tolerably well, but they will not keep thrifty and healthy after that. The old plants should then be lifted in the fall, divided, and transplanted. But the better plan is to keep up a succession of young plants from cuttings by securing a fresh collection every year.

PHLOX DECUSSATA—With erect flower stems growing three to four feet high. Choice distinct varieties selected from among one hundred sorts.

SELECT ROSES.

We grow Roses in two ways, viz.: on their own roots from cuttings, and budded low on the Manetti.

We find many varieties of Roses grown on this stock adapt themselves to a greater range of climate and soil, bloom more profusely, endure better the heat of the summer, and make far stronger plants than if grown on their own roots. Many object to budded Roses on account of the suckers they sometimes throw out; but if proper attention is paid to the planting, this will rarely be an annoyance.

Budded Roses should be planted sufficiently deep so that the junction of the bud with the stock is from two to three inches below the surface of the earth. We cannot too forcibly direct attention to the above rule

SUCKERS—The shoots or branches that start from below the junction of the bud with the stock are termed suckers.

The plants which we offer are dormant from the open ground, two years old on own roots or one year old budded on the Manetti,

BRIEF DIRECTIONS FOR PLANTING, ETC. WHEN TO PLANT.

Roses can be planted both in the Fall and the Spring. If the situation be not too much exposed where the Roses are to be set out, we prefer Fall planting for all hardy kinds. Dormant plants set out in the Spring should be planted early, for no plant suffers more from being set out late than the Rose. The plants should be put in friable, rich soil, and firmly pressed in with the foot, taking care not to bruise the roots.

PRUNING.

This operation is pest performed during March. Most Roses do better if moderately pruned; This operation is best performed during March. Most Roses do better it moderately pruned; some sorts require two-thirds of the past year's growth removed; for others, to remove one-half to one-third is sufficient. All must be more or less pruned when planted; do not neglect this. As a general rule the more vigorous the variety the less it should be pruned. All weak or decayed wood should be entirely cut out, and also any shoots that crowd the plant and prevent free entrance of light and air. Besides Spring pruning, many kinds of Hybrid Perpetuals require to be pruned as soon as their first blossoming is over, in order to induce a free display of flowers in Autumn.

PROTECTION.

——All Rose bushes need protection if left out during the winter in this and similar climates. One of the best methods is by hilling up with earth; or by strewing leaves or straw lightly over the plants and securing them with evergreen branches, oftentimes the latter are in themselves sufficient. Where the weather is extremely severe, of course, greater precautions must be adopted.

INSECTS.

If proper attention is paid to soil, planting, watering, etc., and a few simple directions heeded, you will not often be greatly troubled.

In the month of May, or as soon as the leaves have pushed forth, the rose caterpillar makes its appearance; he can readily be detected, for he glues a leaf or two together to form his shelter. Every day the bushes should be gone over, and these glued leaves pinched between the finger and thumb, so as to crush the caterpillar; let no fastidious grower neglect this, or be induced to try other remedies; this is the only one that is simple and effective. For other insects, such as the saw fly, larvæ, and all such as come at a later date than the caterpillar, an occasional syringing vigorously applied, will prove an excellent preventive. When they have made their appearance, a sprinkling of powdered white hellebore over the plants will often destroy or disperse them; but the plants should be well moistened before the hellebore is applied, so that it will remain. remain.

For the rose bug, hand picking must be resorted to; it is proof against hellebore, whale-oil

soap, and all such applications.

MILDEW.

This disease is generally caused by extremes of heat and cold, and by a long continuance of damp, cloudy weather. The best remedies are sulphur and soot; one of these should be applied the moment the disease makes its appearance. It is a good plan to previously sprinkle the plants with water, so that the substance applied will adhere.

ABBREVIATIONS USED, DESCRIBING THE HABIT OF GROWTH.

Vig.—For vigorous, being those varieties which are most rampant in growth and produce long, strong shoots.

Free.—Varieties which rank next to the above in growth.

Mod.—Moderate; these make a fair, compact growth, but less strong than the preceding.

Dwf.—Dwarf; these are the most delicate or slow-growing sorts. Among hardy Roses, those marked dwf. are almost invariably budded.



CRIMSON RAMBLER ROSE.

MANNER OF DESCRIPTION.

1st.—Habit of Growth.—Vig., free, mod., dwf. 2d.—Color.—The prevailing shade in the most perfect development of the flower. 3d.—Size.—Small. Flowers from one to two inches in diameter.

Ad.—Size.—Small. Flowers from two to three inches in diameter.

Medium. Flowers from two to three inches in diameter.

Large. Flowers from three to four inches in diameter.

Very Large.—Flowers from four to five inches in diameter.

4th.—Fullness.—Semi-Double: With two to four rows of petals. Double: Having more than four rows of petals, but which show the stamens when fully blown. Full: When the

than four rows of petals, but which show the stamens when fully blown. FLLE: when the stamens are hid.

5th.—Form.—Cupped: Inner petals shorter than the outer ones; the latter stand erect and are generally somewhat incurved. GLOBULAR: Outer petals are concave with convex edges, folding richly one above the other, tapering from the center. FLAT: The surface of the flower is level or nearly even, and all the petals are exposed to view.

6th.—Peculiarities of foliage, thorns, number of leaflets, fragrance, etc.

It is hoped the above will make intelligible the terms used to describe the different varieties.

HARDY ROSES.

CLIMBING ROSES (PRAIRIE, ETC.)

The Prairies are much the most valuable of all the non-remontant climbers. The foliage is rough, large, with five leaflets generally of a dark color; they surpass all climbers in hardiness. The flowers are produced in large clusters late in the season, when other Summer Roses are gone. When it is desired to cover walls, unsightly buildings, etc., with Roses, none will be found to do the work so efficiently.

ANNA MARIA, vig.—Blush, cluster large; has few thorns.

BALTIMORE BELLE, vig.—Pale blush, becoming nearly white; compact and fine.

- CRIMSON RAMBLER-The Wonderful New Japanese Rose-By far the most important and valuable acquisition of recent years. The Crimson Rambler is unquestionably an acquisition, a novelty of high order, and most distinct in its characteristics. It is a running or climbing rose of vigorous habit, strong and rapid growth, with handsome, shining foliage, and produces in marvelous abundance, clusters of the brightest crimson semi-double roses. Its clustered form, its brilliancy, the abundance of its bloom, and the great length of time the flowers remain on the plant without falling or losing their brilliancy, are qualities which will make this new claimant for admiration an assured favorite. For verandas, walls, pillars, and fences, it is a most suitable plant. If grown in beds and pegged down it produces marvellous heads of bloom, or it can be grown in bush form and thus become a most striking object. We planted this rose out doors along with Hybrid Perpetuals and other hardy roses, and the plants came through the winter even better than many of the hardy varieties, remaining fresh and green to the very tips. But it is not only for out-door use that it is valuable; it can also be employed most satisfactorily for decorating in-doors when grown in pots. We are satisfied that this is the greatest rose novelty of recent years. (See cut, page 56.)
- GEM OF THE PRAIRIES, free—Red, occasionally blotched with white, large, flat flowers; the only variety in the class which is fragrant.
- MRS. HOVEY, vig.—Pale, delicate, blush becoming almost white; resembles Baltimore Belle.
- QUEEN OF THE PRAIRIES, vig.—Bright rosy red, frequently with white stripe. Foliage large and quite deeply serrated.
- SETIGERA—Michigan or Prairie Rose—This is not a new rose by any means, but it seems to have been lost sight of for a number of years. Now that single roses are so popular, this variety will be much sought after. It is a climber and when trained over a veranda makes a beautiful display. Large single flowers, of a deep rose color.
- TRIUMPHANT, vig.—White, tinted with flesh; double and compact; distinct. Seven leaflets are not uncommon.
- WICHURAIANA OR MEMORIAL ROSE—Japanese Trailing Rose—A distinct and valuable variety from Japan; it is a low-trailing species, its stems creeping on the earth almost as closely as the Ivy. The flowers are produced in the greatest profusion in clusters on the end of every branch, after the June

roses are past, from the first week in July throughout the month. They are pure white, 1½ to 2 inches across, with yellow stamens, and have the strong fragrance of the *Banksia* rose. It is quite hardy, with the exception of the latest immature growth, which may be cut back to some extent. This variety has proved valuable as a covering for banks, rockeries, etc., and for use in cemeteries.

PINK RAMBLER (Euphrosine)—Flowers medium size, pink, in clusters, very pretty.

WHITE RAMBLER (Thalia)—Small or medium, daisy-like, pretty white flowers in large clusters; fragrant, very ornamental.

YELLOW RAMBLER (Aglaia)—Flower's two to two and a half inches in diameter, in clusters of six to ten. Yellow in bud, but white when fully open; when half open the flowers are tinged with yellow, slightly fragrant. Plant vigorous and free-blooming; hardy, very pretty and desirable.

MOSS ROSES.

The Moss Roses are favorites with every one, on account of the beautiful buds, which, for bouquets and cut flowers, are invaluable. They are subject to mildew, require close pruning and high culture, but amply repay careful attention by the increased size and beauty of the flowers. They are all very hardy. The foliage is generally somewhat crimpled, and has mostly seven leaflets.

BLANCHE MOREAU, vig.—Pure white, large, full, and of perfect form; the buds and flowers produced in clusters, and freely furnished with a deep green moss. A valuable variety.

COMMON MOSS, free—Pale rose, very beautiful buds. A great favorite.

COMTESSE DE MURINAIS, vig.—White, tinged with flesh.

CRESTED MOSS, free—Deep pink-colored buds, surrounded with a mossy fringe and crest; free from mildew. A fragrant, very beautiful rose.

GRACILIS, free—Deep pink buds, surrounded with delicate fringe-like moss. The most beautiful of all the Moss Roses.

PRINCESS ADELAIDE, vig.—Pale rose, of medium size and good form. Foliage often blotched or variegated. Good in bud and flower. Do not prune this variety severely.

SALET, free or vig.—Light rose, large, full; pretty in bud.

WHITE BATH, mod.—White, sometimes tinged with flesh; attractive in bud and open flower. The best white Moss.

HYBRID NOISETTE ROSES.

This is a modern group of considerable importance, obtained chiefly from crosses between Remontant, Bourbon, and Noisette Roses. They generally flower in small clusters and bloom freely throughout the year. The flowers are mostly white, and, though small, are generally of good form. They are of about the same hardiness as the Bourbons and Hybrid Teas, requiring a little more care in their protection than the Hybrid Perpetuals.

COQUETTE DES ALPES, vig. or free—White, slightly shaded with carmine; medium size; form semi-cupped; wood long-jointed; larger flowers than the others. The strongest grower of the entire class.

COQUETTE DES BLANCHES, vig. or free—Pure white, sometimes faintly tinged with pink; flowers of medium size, somewhat flat, but full and very pretty; growth more bushy and symmetrical than any of the others. One of the hardiest. Later than the rest in coming into flower.

ELIZA BOELLE, *mod.*—White, delicately tinged with pink; medium size; full, beautiful circular form. An exquisite rose.

RUGOSA ROSES AND THEIR HYBRIDS.

This is a very interesting group of Japanese origin. The flowers are mostly single. The plant is highly ornamental on account of its good habit and beautiful, glossy foliage.

MADAME G. BRUANT, vig.—The first of a new race of hybrids. In the bud state, the flowers are long and pointed; when open, semi-double; pure white, and fragrant, and produced freely in clusters at intervals throughout the summer; exceptionally hardy and vigorous; forms a handsome bush.

- RUGOSA ALBA, mod.—A species from Japan. Single, pure white flowers, of five petals; highly scented; a splendid shrub.
- RUGOSA RUBRA, vig.—Another Japan variety. Flowers single, of a most beautiful bright rosy crimson, succeeded by large berries, of a rich rosy red color, and are a great addition to the ornamental character of the plant.

HYBRID REMONTANT OR HYBRID PERPETUAL ROSES.

This class thrives the best in a rich soil. The pruning should be regulated by the habit of growth, the weak shoots closely cut in, those which are vigorous left longer. Most of the varieties are fragrant; some of them, like Alfred Colomb, Mme. Victor Verdier, etc., are most deliciously perfumed.

ciously perfumed.

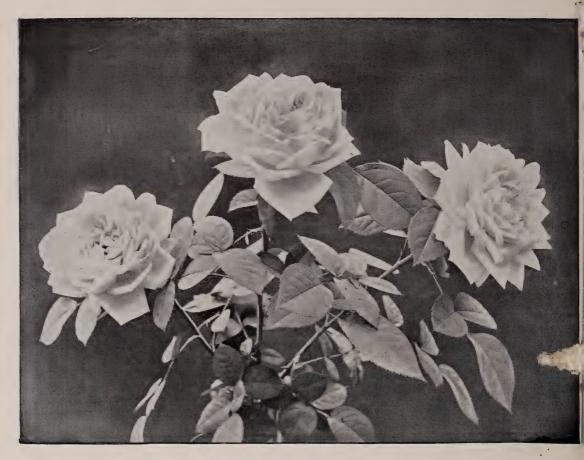
Although they are styled perpetual bloomers, none of them are such in reality. However, many of them yield a fair second crop of flowers in the autumn, which is very acceptable. Aside from this, there is no class, take it all in all, so popular and which gives such general satisfaction.

- ALFRED COLOMB, free—Raised from Jacqueminot. Brilliant carmine crimson; very large, full, and of fine globular form; extremely fragrant, and in every respect a superb sort. Green wood with occasional pale greenish thorns; foliage large and handsome. One of the most useful sorts for general cultivation.
- AMERICAN BEAUTY, vig.—Large, globular; deep pink shaded with carmine; delicious odor; has proved to be a most desirable variety for forcing.
- ANNE DE DIESBACH, vig.—Raised from La Reine. Carmine, a beautiful shade; very large. A superior garden sort; fragrant; one of the hardiest. Valuable for forcing.
- BARON DE BONSTETTEN, vig.—Rich velvety maroon; large, full. A splendid sort.
- BARONESS ROTHSCHILD, mod. or dwf.—Light pink; cupped form; very symmetrical; without fragrance. Very distinct and beautiful; one of the finest exhibition varieties. The wood is short-jointed; very hardy and a late bloomer.
- CHARLES LEFEBVRE, free or mod.—Reddish crimson; very velvety and rich, but fading quickly; large, full and beautifully formed. Foliage and wood light reddish green; few thorns of light red. A splendid rose.
- **CLIMBING JULES MARGOTTIN,** vig.—Carmine rose; fine in open flower and in bud; the best of all the climbing sports. It may be grown either as a Pillar Rose, or by pruning, kept in bush form; it should be in every collection.
- **CLIO**—Raised by William Paul & Son, the celebrated English rose growers. Flowers large, of fine, globular form, flesh color, shaded in the center with rosy pink; growth vigorous; handsome foliage. One of the finest new roses. (See cut page 60.)
- **COUNTESS OF OXFORD,** mod.—Bright carmine, fading in the sun; very large and full; not fragrant. Wood almost thornless; foliage very handsome, large and distinct. Fine in the bud; valuable for forcing.
- EARL OF DUFFERIN, vig.—One of the finest roses of recent years. Rich, brilliant, velvety crimson, shaded with dark maroon; large, full, finely formed; delightful fragrance. A vigorous grower. One of the finest dark roses. It should be in every collection.
- FISHER HOLMES, free or vig.—Deep, glowing crimson; large, moderately full, and of fine imbricated form. A superb rose.
- **FRANCOIS** LEVET, vig.—Cherry-red; medium size; well formed; free bloomer. Valuable on account of its vigorous habit.
- FRANCOIS MICHELON, free—Deep carmine rose; very large, full, and of fine globular form; fragrant and a free bloomer. Habit very erect. A distinct, choice sort; excellent late in June and July, when other varieties are gone and also in the autumn.
- **GENERAL JACQUEMINOT,** vig.—Brilliant crimson; not full, but large and extremely effective; fragrant, and of excellent hardy habit; forces well.



NEW H. P. ROSE, CLIO.

- **HELEN KELLER**—Flowers large, of most perfect form, and fragrant. Color brilliant rosy cerise. A vigorous grower and very free bloomer. A most distinct and lovely rose.
- **JEAN LIABAUD,** free—Crimson maroon, illumined with scarlet; large, full, fragrant. A very beautiful dark rose.
- JOHN HOPPER, free—Bright rose with carmine center; large and full. A profuse bloomer and standard sort.
- **LADY HELEN STEWART,** vig.—Bright crimson scarlet; large, full, and of perfect form, produced on long stiff stems, highly perfumed; distinct and fine. A beautiful and valuable variety.
- LA REINE, free or vig.—Glossy rose, large, moderately full; very free flowering, and one of the most hardy. A useful rose, though no longer Queen.
- LA FRANCE (Hybrid Tea)—Raised from seed of a Tea Rose. Delicate silvery rose, changing to silvery pink; very large; full, of fine globular form; a most constant bloomer; the sweetest, and one of the most useful of all roses.
- **MABEL MORRISON,** mod.—White, sometimes tinged with blush; in the autumn the edges of the petals are often pink. In all, save color and substance of petals, this variety is identical with Baroness Rothschild. A very valuable white rose.
- MADAME GABRIEL LUIZET, vig. or free—Pink, distinct, very large, cupped shape; somewhat fragrant. One of the finest roses in the Catalogue.
- **MAGNA CHARTA,** vig.—Pink, suffused with carmine; full, globular. Foliage and wood light green, with numerous dark spines. A fragrant, excellent rose. Valuable for forcing.
- **MADAME VICTOR VERDIER,** *mod.*—Carmine crimson; large, full, very fragrant; excellent.
- **MARGUERITE DE ST. AMANDE,** free—Bright rose, very beautiful in the bud state; this variety will give more fine blooms in the autumn than almost any other in the class. One of the most valuable roses.
- **MARIE BAUMANN,** *mod.*—Brilliant carmine crimson; large, full, of exquisite color and form; very fragrant. Extra fine.
- MARIE RADY, free—Vermilion, shaded with crimson; large, very full, of fine globular form. A fragrant, superb sort, but a shy bloomer in autumn.
- MARSHALL P. WILDER, vig.—Raised from the seed of Gen. Jacqueminot. It is of vigorous growth, with healthy foliage; flowers large, semi-globular, full, well formed; color, cherry-carmine, much like a light-colored Marie Baumann, or a shade deeper than Marie Rady, and very fragrant. In wood, foliage, and form of flower, it resembles Alfred Colomb, but the seedling excels that famous variety in vigor, hardiness, and freedom of bloom. It continues to bloom profusely long after the other Remontants are out of flower. In brief, it may be described as an improved Alfred Colomb, and as good a rose as has been raised by anyone. It is undoubtedly the finest of its color.
- MARCHIONESS OF LONDONDERRY—A new White Hybrid Perpetual, and one of the best introductions of the Messrs. Dickson & Sons of Newtownards, Ireland. Flowers of great size, measuring seven inches across, perfectly formed and carried on stout stems. Color ivory white; petals of great substance, shell-shaped and reflexed; free-flowering; highly perfumed; growth vigorous, and foliage very handsome. One of the finest roses. Awarded the gold medal of the National Rose Society of England. We have had this variety in flower for several seasons, and regard it as a decided acquisition to the list of hardy white roses. (See cut, page 62).
- **MARGARET DICKSON**, vig.—Of magnificent form; white, with pale flesh center; petals very large, shell-shaped and of great substance; fragrant; a very promising variety; foliage very large, dark green.
- MRS. R. G. SHARMAN CRAWFORD—Raised by Dickson & Sons of Newtownards, Ireland. Color deep, rosy pink, outer petals shaded with pale flesh, white at base of petals; flowers large, of perfect imbricated form, and freely produced, flowering from early summer until late in autumn. Growth vigorous. Awarded gold medal of the National Rose Society of England, and many first-class certificates. A valuable addition.



MARCHIONESS OF LONDONDERRY.

Best New Hardy White Rose.

MAURICE BERNARDIN, vig. or free—Bright crimson; large, moderately full; a good free-blooming sort, generally coming in clusters. Perhaps the most prolific of all crimson roses in the spring.

MERVEILLE DE LYON, mod.—Pure white, shaded and marked with satiny-rose; flowers very large, double, and of a beautiful cup shape. A seedling from Baroness Rothschild, with the same habit, but larger. A superb variety.

MRS. JOHN LAING, vig.—Soft pink; large and of fine form, produced on strong stems; exceedingly fragrant; one of the most valuable varieties for forcing, and flowers continuously in the open ground. One of the most beautiful roses of recent introduction.

PAUL NEYRON, vig.—Deep rose color; good tough foliage; wood rather smooth; by far the largest variety in cultivation. A free bloomer; very desirable as a garden rose; valuable for forcing.

PIERRE NOTTING, free—Deep maroon, illumined with bright crimson, often suffused with velvet; large, or very large; globular form, pointed buds; highly scented. A superb dark rose, often at its best in the autumn.

PRINCE CAMILLE DE ROHAN, free—Deep velvety crimson; large, moderately full. A splendid rose.

ULRICH BRUNNER, vig.—Brilliant cherry red, a very effective color; flowers of fine form and finish, carried well upon the plant; petals of great substance; plant vigorous, hardy, and resists mildew. One of the best varieties for forcing and open-air culture.

VICTOR VERDIER, mod,—Bright rose, with carmine center, a very fresh shade of color; not fragrant; free bloomer; wood nearly smooth. This variety, with its numerous progeny, is more tender than any of the other types in the class. A beautiful rose.

MISCELLANEOUS ROSES.

HARRISON'S YELLOW, free—Golden yellow; medium size; semi-double. freer bloomer than Persian.

LORD PENZANCE'S HYBRID SWEET BRIERS-Apart from their extreme beauty they are most interesting, being crosses between common Sweet Brier and various other roses. It is certain they are a great acquisition. Like their parent, the common Sweet Brier, the foliage is deliciously scented. The flowers are single and of the most beautiful tints.

MADAME PLANTIER, free—Pure white, above medium size; full. Produced in great abundance early in the season. Foliage rather small, seven leaflets. One of the best white roses for hedges and for massing in groups.

PERSIAN YELLOW, free—Bright yellow, small, nearly full. It is desirable to grow more than one plant, and by pruning one this year in the usual way, and the other plant the next year, annual crops of flowers may be had.

TREE ROSES.

We offer the finest hardy sorts in a variety of colors but only for Spring delivery.

HARDY BORDER PLANTS.

We have an immense collection—the following are particularly desirable.

ANEMONE JAPONICA, RED-A distinct and beautiful species; flowers 21/2 inches in diameter; bright purplish rose, with golden yellow centers, borne in great profusion from September to November. Height 2½ feet; habit neat and compact; very desirable and effective as a pot plant, and in lines or masses in beds or mixed borders.

ANEMONE JAPONICA, WHITE—Same as above except that flowers are pure white, with golden center.

JAPAN ANE= DOUBLE MONE, WHIRLWIND

-A variety of the well known Japan Anemone, producing double white flowers in great profu-sion in the autumn. One of the finest fall-flowering perennials. Hardy.

EULALIAS-Showy, beautiful, tall and perfectly

hardy grasses.

These beautiful hardy grasses are deserving of the highest commendation. For the garden they are invaluable, being very showy and ornamental and of easy cultivation. They should be in every collection.

Japonica—The type; a

vigorous grower with large plumes; 3 feet.

Var. Gracillima Univit= tata-A new and beautiful ornamental grass, with narrow graceful foliage. Very valuable.

Var. Variegata - Handsomely variegated leaves; 4 feet.

Var. Zebrina — Zebrastriped leaves.



A ROW OF EULALIAS. (REDUCED.)

PLANTAIN LILIES (Funkia)—A very interesting and beautiful genus, with luxuriant foliage and handsome lily-like flowers.

HARDY DOUBLE SUNFLOWER—A blaze of gold in late summer and early autumn, and altogether one of the showiest of hardy perennials.

FRAGRANT YELLOW DAY LILY (Hemerocallis flava)—One of the finest hardy plants; flowers large in clusters; golden yellow and possessing a delightful fragrance; appearing in June; plant vigorous and of graceful habit.

GERMAN IRIS or FLEUR DE LIS—Of these superb well known perennials, we have a very choice collection; no garden is complete without them.

JAPAN IRIS—Flowers differ from the ordinary kinds, in being broad and flat.

They exhibit a wonderful variety of colors and shades and appear later than the others. They rank among the most desirable of hardy plants; succeed best in a moist soil.

YUCCA OR SPANISH BAYONET—Has a fine appearance; the stem is two feet above the ground, covered with large, creamy-white, bell-shaped flowers on

laterals, forming a perfect pyramid; valuable for rockwork.

RUDBECKIA, GOLDEN GLOW, OR SUMMER CHRYSANTHEMUM—A large, showy plant, attaining in good soil a height of six to eight feet the same season planted. Flowers three and one-half inches in diameter, double, well formed and of a deep golden yellow color, resembling the yellow Chrysanthemums, and borne on long stems which render them suitable for cutting. Plants bloom profusely from July till September. One of the best novelties in hardy flowering plants.

Our general collection of hardy Perennials is one of the largest in this country.

Those desiring a choice assortment will do well to leave the selection of varieties to us; we make up these assortments so as to give a succession of

flowers from early spring until frost.

HOLLAND BULBS.

FOR FALL PLANTING ONLY.

HYACINTHS—Named Varieties—Double and single; various shades of red, white, blue and yellow. Our selection of varieties.

Unnamed Varieties—Double and single, red, white, blue and yellow. Our selection.

Early Roman White.

TULIPS—Duc Van Thol—Crimson, Rose, Scarlet, White, Yellow.

Single Early-Named varieties. Our selection.

Double-Named varieties. Our selection.

For Beds—In three colors, white, scarlet, and yellow.

Unnamed or Mixed-Double and single.

JONQUILS—Double and single.

POLYANTHUS NARCISSUS—Specially adapted for house culture. Not hardy in this climate. A choice selection.

GARDEN NARCISSUS OR DAFFODILS—Popular border flowers, easily cultivated, early flowering, and quite hardy. Choice assortment of varieties, both double and single, embracing those with cup-shaped flowers; also trumpet varieties.

CROCUS-Fine Named Varieties-white, blue, and yellow.

Unnamed or Mixed-White, blue, and yellow.

SNOWDROP—Single and double. The first spring flower.

SCILLA-Siberica, early-Small blue flowers; very pretty.

Campanulata, late—Small blue flowers; very pretty.

GRAPE HYACINTH-Slender spikes of blue flowers.

GLORY OF THE SNOW—(Chionodoxa)—One of the earliest and most charming of spring flowering bulbs. Flowers of a lovely blue.

THE PACKING SEASON.

The spring packing and shipping season usually opens here about the 1st of April. The planting season is not regulated by any particular month or day, nor by the state of vegetation where the planting is to be done, but by the condition of the trees to be planted. Hence, trees can be sent with safety from Rochester to localities several degrees south, even if they do not arrive until the ordinary transplanting season in that locality has passed. In the autumn, we usually commence digging and packing the first week in October.

FALL PLANTING.

The Spring planting season is often of such short duration that much intended work is necessarily omitted or postponed. In the fall there is abundance of time to plan and plant, and the work therefore can frequently be done as satisfactorily as in the Spring.

The-once prevalent notion that Fall planting is not advantageous, has proved to be erroneous, and with the exception of evergreens, almost everything called hardy can be planted successfully in the autumn, except in some regions where the winters are extremely severe, or in exposed situations, in which cases Spring planting is absolutely necessary.

